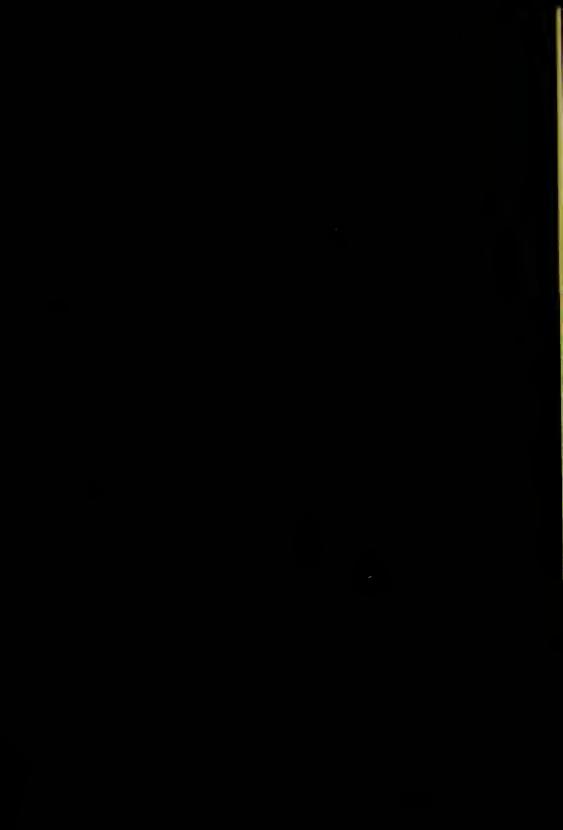


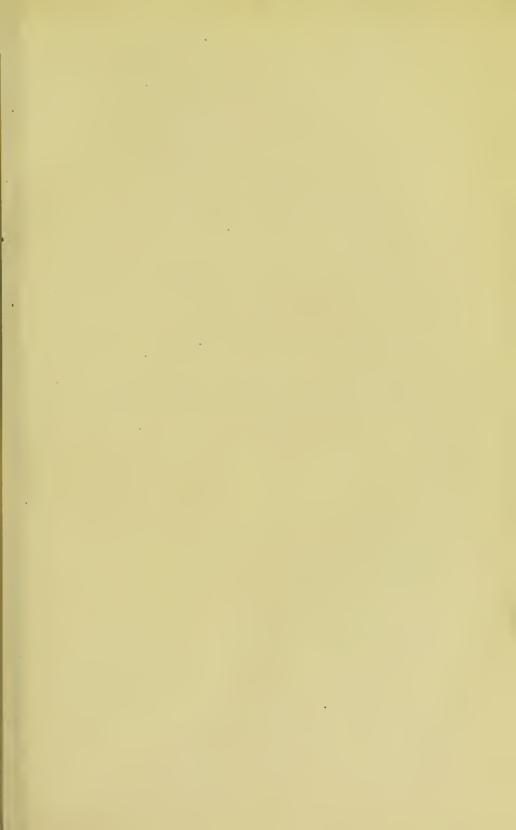
R.C.P. EDINBURGH LIBRARY

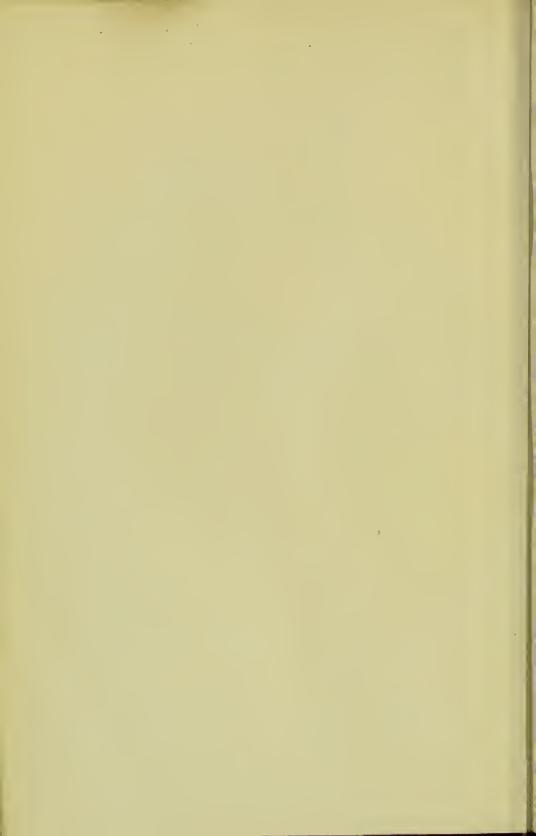
R26022K0236



1016

P2,33.





THE

VOCABULARY OF PHILOSOPHY.

# STANDARD TEXT-BOOKS

Uniform with this Volume.

MENTAL SCIENCE: S. T. COLERIDGE'S CELEBRATED ESSAY ON METHOD; Archbishop Whately's Treatises on Logic and Rhetoric. Complete in One Volume. (Encyclopedia Metropolitana.) Crown 8vo, cloth, 5s. Tenth Edition.

Or, the Treatises separately:

- COLERIDGE (SAMUEL TAYLOR): A DISSERTATION ON THE SCIENCE OF METHOD; or the Laws and Regulative Principles of Education, with a Synopsis. Crown 8vo, cloth, 2s. Ninth Edition.
- II. WHATELY (Archbishop): A TREATISE ON LOGIC. Crown 8vo, cloth, 3s. Original Edition, with Synopsis and Index.
- III. WHATELY (Archbishop): A TREATISE ON RHETORIC. Crown Svo, cloth, 3s. 6d. Original Edition, with Synopsis and Index.
- SENIOR (Prof.): A TREATISE ON POLITICAL ECONOMY:
  The Science which treats of the Nature, the Production, and the Distribution of Wealth. By NASSAU WILLIAM SENIOR, M.A., Late Professor of Political Economylin the University of Oxford. (Encyclopadia Metropolitana.) Crown 8vo, Cloth, 4s. Sixth Edition.
- CRAIK (Prof.): A MANUAL OF ENGLISH LITERATURE, for the Use of Colleges, Schools, and Civil Service Examinations. By George Lillie Craik, Ll.D., late Professor of History and English Literature in Queen's College, Belfast. Crown 8vo, cloth. 7s. 6d. Seventh Edition.

# WORKS BY WILLIAM RAMSAY, M.A.,

Trinity College, Cambridge, Late Professor of Humanity in the University of Glasgow.

- I. RAMSAY (Prof.): A MANUAL OF ROMAN ANTI-QUITTES: Law, Constitution, Political and Private Life, Religion, &c. For the use of Advanced Students. With Map, numerous Engravings, and very copious Index. Revised and enlarged, with an additional Chapter on Roman Agriculture. Crown Svo, cloth, 8s. 6d. Tenth Edition.
- II. RAMSAY (Prof.): AN ELEMENTARY MANUAL OF ROMAN ANTIQUITIES. Adapted for Junior Classes. Numerous Illustrations. Crown 8vo, cloth, 4s. Sixth Edition.
- III. RAMSAY (Prof.): A MANUAL OF LATIN PROSODY. With Copious Examples and Critical Remarks. For the use of Advanced Students. Crown Svo, cloth, 5s. Fifth Edition.
- IV. RAMSAY (Prof.): AN ELEMENTARY MANUAL OF LATIN PROSODY. Adapted for Junior Classes. Crown Svo. cloth, 2s.

# VOCABULARY OF PHILOSOPHY,

MENTAL, MORAL, AND METAPHYSICAL;

WITH

QUOTATIONS AND REFERENCES
FOR THE USE OF STUDENTS.

BY

WILLIAM FLEMING, D.D.,

LATE PROFESSOR OF MORAL PHILOSOPHY IN THE UNIVERSITY OF GLASGOW.

Third Edition.

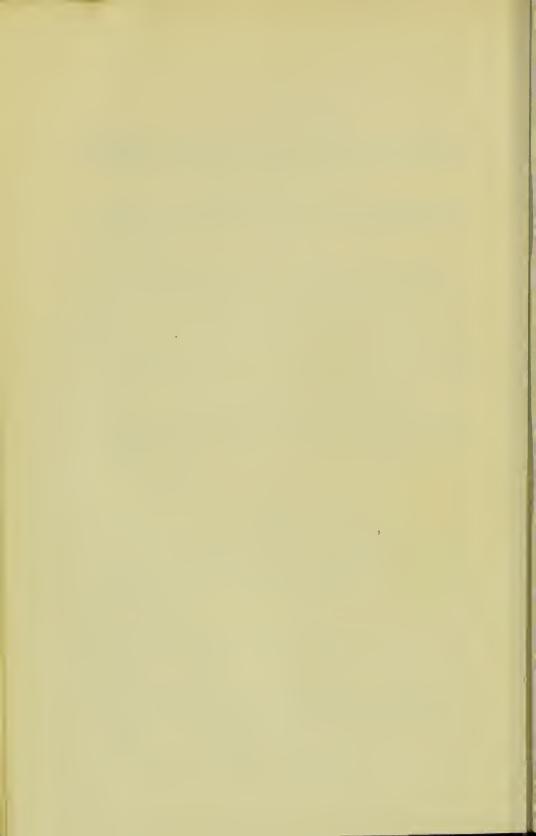
EDITED BY HENRY CALDERWOOD, LL.D.

PROFESSOR OF MORAL PHILOSOPHY IN THE UNIVERSITY OF EDINBURGH.

LONDON:
CHARLES GRIFFIN AND COMPANY.
STATIONERS' HALL COURT.

1876.

(All rights reserved.)



# PREFATORY NOTE BY THE EDITOR.

THE fact that the *Vocabulary of Philosophy* by the late Professor Fleming soon passed through two editions, shews that it has supplied a want felt by those entering upon philosophic study. Recognising this, I have willingly responded to the request to edit a new issue of the work.

My purpose has been to retain the book as nearly as possible in the form in which it came from the hands of Professor Fleming. Occasionally I have withdrawn some quotations, when their number seemed too large. Additional manuscript left by Professor Fleming has been carefully examined, and some part of the new matter has been introduced. Vocables have been inserted, the absence of which left a blank in a Vocabulary of Philosophy.

In only one thing have I thought it needful to depart from Professor Fleming's plan. I have ventured to introduce definitions of the leading vocables. These definitions constitute the new feature in the edition now published, and are enclosed within brackets, to indicate the portions for which I must be held responsible.

H. CALDERWOOD.

THE UNIVERSITY OF EDINBURGH, 11th September 1876.

# ABILITY and INABILITY—

all ethical law.—Ed.] It is the disposition to use rightly the powers and opportunities which God has given; as when it is written, "It is a joy to the just to do judgment."

Inability, Mor. [Deficiency in ethical motive consequent upon want of harmony between personal inclination and moral requirements.—Ed.] It is the want of a right disposition; as in those of whom it is written, "They have eyes full of adultery, and cannot cease from sin." "That which prevents a man from doing as he will, is natural inability. That which prevents him from doing as he ought, is moral inability."—Day, On the Will, p. 97.

ABROGATION (abrogo, to recall) is the annulling or recalling of a law.

on excluding, one by one, certain suppositions, or certain classes of things, from that whose real nature we are seeking to ascertain. Thus, certain symptoms, suppose, exclude "small-pox;" that is, prove this not to be the patient's disorder; other symptoms, suppose, exclude "scarlatina," &c., and so one may proceed by gradually narrowing the range of possible suppositions.—Whately, Logic, bk. ii. ch. iii. sec. 4, and ch. v. sec. 1, subs. 7; Bacon, Novum Organum, bk. ii. 26.

ABSOLUTE (absolutum, from ab and solvo, to free or loose from) signifies what is free from restriction or limit. [Properly, self-sufficient, independent both in nature and in action.—Ed.]

"We must know what is to be meant by absolute or absoluteness; whereof I find two main significations. First, absolute signifieth perfect, and absoluteness, perfection; hence we have in Latin this expression—Perfectum est omnibus numeris absolutum. And in our vulgar language we say a thing is absolutely good when it is perfectly good. Next, absolute signifieth free from tie or bond, which in Greek is ἀπολελυμένου."—Knox, Hist. of Reform., Pref.

1. What is complete or perfect in itself, as opposed to what is relative.

2. What is free from restriction, as opposed to what exists secundum quid. The soul of man is immortal absolutely; man is immortal only as to his soul.

3. What is underived. It thus denotes self-existence, and is predicable only of the First Cause.

4. What is not only free from external cause, but also from condition.—V. Relative.

Absolute.—"The term absolute is of twofold (if not threefold) antiquity, corresponding to the double (or treble) signification of the word in Latin. 1. Absolutum means what is freed, or loosed; in which sense the absolute will be what is aloof from relation, comparison, limitation, dependence, &c., and is thus tantamount to τὸ ἀπόλυτον of the lower Greeks. In this meaning, the Absolute is not opposed to the Infinite. 2. Absolutum means, finished, perfected, completed; in which sense the Absolute will be what is out of relation, &c., as finished, perfect, complete, total, and thus corresponds to τὸ ὅλον, and τὸ τέλειον of Aristotle. In this acceptation (and it is that in which I exclusively use it) the Absolute is diametrically opposed to, is contradictory of, the Infinite."—Sir W. Hamilton, Discussions, p. 14, note.

"By the Absolute, is meant that which exists in and by itself, having no necessary relation to any other being. By the Infinite is meant that which is free from all possible limitation; that than which a greater is inconceivable, and which, consequently, can receive no additional attribute or mode of existence, which it had not from all eternity."—

Mansel, Limits of Religious Thought, p. 45.

"The plain and etymological meaning of the term is freed or loosed, and hence it means freed from restriction or condition. In this sense it is evident that the Infinite must be absolute, for that which is not limited does not afford the possibility of restriction. This is the sense in which philosophers have uniformly used the word; and in this sense Sir W. Hamilton admits that 'the Absolute is not opposed to the Infinite.'"—Calderwood, Phil. of Infinite, 2 ed. p. 165.

Absolute, Unconditioned, Infinite.—"The Absolute, taking its etymological sense, may be explained as that which is free from all necessary relation; which exists in and by itself, and does not require the prior or simultaneous existence of anything else. The Unconditioned, in like manner, is that which is subject to no law or condition of being; which exists, therefore, in and by itself, and does not imply the prior or simultaneous existence of anything else. The Absolute and Unconditioned are also identical with the Real; for relation

is but a phenomenon, implying and depending on the prior existence of things related; while the true Real is unrelated. Such a science as metaphysics, which has in all ages been proclaimed as the science of the Absolute, the Unconditioned, and the Real, according to Kant, must be unattainable by man; for all knowledge is consciousness, and all consciousness implies a relation between the subject or person conscious, and the object or thing of which he is conscious. An object of consciousness cannot be Absolute; for consciousness depends on the laws of the conscious mind, its existence as such implies an act of consciousness, and consciousness is a relation. It cannot be the Unconditioned; for consciousness depends on the laws of the conscious mind, and these are conditions. It cannot be the Real; for the laws of our consciousness can only give us things as they appear to us, and do not tell us what they are in themselves."-Mansel,

Lecture on Philosophy of Kant, p. 25.

"Mr. Calderwood, defines the Absolute, which he rightly identifies with the Infinite, as 'that which is free from all necessary relation: 'it may exist in relation, provided that relation be not a necessary condition of its existence.' Hence he holds that the Absolute may exist in the relation of consciousness, and in that relation be apprehended, though imperfectly, by man. On this theory we have two absolutes: the Absolute as it exists out of consciousness, and the Absolute as it is known in consciousness. Mr. Calderwood rests his theory on the assumption that these two are one. How is this identity to be ascertained? How do I know that the absolute is my absolute? I cannot compare them; for comparison is a relation, and the first Absolute exists out of relation. Again, to compare them, I must be in and out of consciousness at the same time; for the first Absolute is never in consciousness, and the second is never out of it. Again, the Absolute as known is an object of consciousness; and an object of consciousness as such, cannot exist, save in relation. But the true Absolute, by its definition, can exist out of relation; therefore the Absolute as known is not the true Absolute. Mr Calderwood's Absolute in consciousness is only the Relative under a false name."-Mansel, Lecture on Philosophy of Kant, p. 38.

According to Sir William Hamilton (Discussions, p. 13), "The Unconditioned denotes the genus of which the Infinite and the Absolute are the species."

As to our knowledge or conception of the Absolute, there

are different opinions. .

- 1. According to Sir William Hamilton, "The mind can conceive, and consequently can know, only the limited, and the conditionally limited. The unconditionally unlimited, or the Infinite, the unconditionally limited, or the Absolute, cannot positively be construed to the mind; they can be conceived at all only by thinking away, or abstraction of those very conditions under which thought itself is realized; consequently the notion of the Unconditioned is only negative—negative of the conceivable itself."
- 2. According to Kant, the *Absolute* or *Unconditioned* is not an object of knowledge; but its notion as a regulative principle of the mind itself, is more than a mere negation of the conditioned.
- 3. According to Schelling, it is cognizable, but not conceivable; it can be known by a sinking back into identity with the *Absolute*, but is incomprehensible by consciousness and reflection, which are only of the *Relative* and the *Different*.
- 4. According to Cousin, it is cognizable and conceivable by consciousness and reflection, under relation, difference, and plurality.

Instead of saying that God is Absolute and Infinite, Krause, and his admirer, Tiberghien (Essai des Connaissances Humaines, pp. 738, 745), ascribe to him Sèité (selbheit) and Totality. Totality or the Infinite manifests itself everywhere in nature. Nature is made up of wholes, and all these constitute one whole. In spirit everything manifests itself under the character of spontaneity or sèité. Spirit always is what it is by its own individual efforts.

All philosophy aims at a knowledge of the *Absolute* under different phases. In psychology, the fundamental question is, have we ideas that are à priori and absolute?—in logic, is human knowledge absolute?—in ethics, is the moral law absolute rectitude?—and in metaphysics, what is the ultimate ground of all existence or absolute being?

See Reid's Intellectual Powers, essay v. ch. iii.; Edinburgh Review for October 1829; Sir William Hamilton (Discussions); Tiberghien (Essai des Connaissances Humaines).—V. Infinite, Unconditioned, Real.

ABSTINENCE (abs teneo, to hold from or off)—"is whereby a man refraineth from anything which he may lawfully take."—Elyot, Governour, bk. iii. ch. 16.

Abstinence is voluntarily refraining, for a moral or religions end, from things which nature, and especially physical nature, needs or delights in. It corresponds to the 'Απέχου of the precept of Epictetus,' Ανέχου και ἀπέχου; Sustine et abstine. The Stoics inculcated abstinence in order to make the soul more independent of the body and of the things belonging to the body.—Christian abstinence is founded in humility and self-mortification.—V. ASCETICISM, STOICISM.

ABSTRACT, ABSTRACTION (abstractio, from abs traho, to draw away from. It is also called separatio resolutio, and precisio).

[Abstract is applied to a quality considered in itself apart from the object in which it exists.

Abstraction is the exercise of mind by which attention is withdrawn from certain qualities in an object, or from certain objects among many, and concentrated upon others.—Ed.]

Dobrisch observes that the term abstraction is used sometimes in a psychological, sometimes in a logical sense. In the former we are said to abstract the attention from certain distinctive features of objects presented (abstrahere [mentem] a differentiis). In the latter, we are said to abstract certain portions of a given concept from the remainder (abstrahere differentias).—Mansel, Prolegom. Log., note, p. 26.

Abstraction (Psychological), says Mr. Stewart (Elements of the Philosophy of Human Mind, chap. iv.), "is the power of considering certain qualities or attributes of an object apart from the rest; or, as I would rather choose to define it, the power which the understanding has of separating the combinations which are presented to it." Perhaps it may be more correctly regarded as a process rather than a power—as a function rather than a faculty. Dr. Reid has called it (Intell. Powers, essay v. ch. 3) "an operation of the understanding. It consists in the resolving or analyzing a subject (object) into its known attributes, and giving a name to each attribute, which

# ABSTRACT, ABSTRACTION—

shall signify that attribute and nothing more." Attributes are not presented to us singly in nature, but in the concrete or growing together, and it is by abstraction that we consider them separately. In looking at a tree we may perceive simultaneously its trunk, and its branches, and its leaves, and its fruit; or we may contemplate any one of these to the exclusion of all the rest; and when we do so it is by the operation of mind which has been called abstraction. It implies an exercise of will as well as of understanding; for there must be the determination and effort to fix the energy of the mind on the attribute specially contemplated.

Abstraction (Logical), "As we have described it, would include three separate acts: first, an act of comparison, which brings several intuitions together; next, one of reflection, which seeks for some marks which they all possess, and by which they may be combined into one group; and last, one of generalization, which forms the new general notion or conception. Kant, however, confines the name of abstraction to the last of the three; others apply it to the second. It is not of much consequence whether we enlarge or narrow the meaning of the word, so long as we see the various steps of the process. The word means a drawing away of the common marks from all the distinctive marks which the single objects have."—Thomson, Outline of the Laws of Thought, p. 107.

"The process," says Whately (Logic, bk. i. sec. 6), "by which the mind arrives at the notions expressed by 'common' (or in popular language, 'general') terms is properly called 'generalization,' though it is usually (and truly) said to be the business of abstraction; for generalization is one of the purposes to which abstraction is applied. When we draw off and contemplate separately any part of an object presented to the mind, disregarding the rest of it, we are said to abstract that part of it. Thus, a person might, when a rose was before his eye or his mind, make the scent a distinct object of attention, laying aside all thought of the colour, form, &c.; and thus, even though it were the only rose he had ever met with, he would be employing the faculty of abstraction; but if, in contemplating several objects, and finding that they agree in certain points, we abstract the

# ABSTRACT, ABSTRACTION—

eireumstances of agreement, disregarding the differences, and give to all and each of these objects a name applicable to them in respect of this agreement,—i.e., a common name, as 'rose;' or, again, if we give a name to some attribute wherein they agree, as 'fragrance,' or 'redness,' we are then said to 'generalize.' Abstraction, therefore, does not necessarily imply generalization, though generalization implies abstraction." In opposition to this, see Thomson, Outline of the Laws of Thought, part i. seet. 24.

"A person who had never seen but one rose," says Mr Stewart (Addenda to vol. i., Phil. of Hum. Mind), "might yet have been able to consider its eolour apart from its other qualities; and, therefore, there may be such a thing as an idea which is at once abstract and particular. After having perceived this quality as belonging to a variety of individuals, we can eonsider it without reference to any of them, and thus form the notion of redness or whiteness in general which may be called a general abstract idea. The words abstract and general, therefore, when applied to ideas, are as completely distinct from each other as any two words to be found in the language. It is indeed true, that the formation of every general notion presupposes abstraction, but it is surely improper, on this account, to eall a general term an abstract term or a general idea an abstract idea."

Mr. John S. Mill also eensures severely (Log., vol. i. 2d ed., p. 35) the practice of applying the expression "abstract name" to all names which are the result of abstraction or generalization, and eonsequently to all general names, instead of confining it to the names of attributes. He uses the term abstract as opposed to concrete. By an abstract name he means the name of an attribute—by a concrete name the name of an object. The sea is a concrete name. Saltness is an abstract name. Some abstract names are general names, such as colour; but rose-colour, a name obtained by abstraction, is not a general name.

"By abstract terms, which should be carefully distinguished from general names, I mean those which do not designate any object or event, or any class of objects or events, but an attribute or quality belonging to them; and which are capable of standing grammatically detached, without being

# ABSTRACT, ABSTRACTION-

joined to other terms: such as, the words roundness, swiftness, length, inuocence, equity, health, whiteness."—S.

Bailey, Letters on Phil. Human Mind, p. 195.

"When the notion derived from the view taken of any object," says Dr. Whately (Log., bk. ii. ch. 5, sec. 1), "is expressed with a reference to, or as in conjunction with, the object that furnished the notion, it is expressed by a concrete term, as 'foolish' or 'fool;' when without any such reference, by an abstract term, as 'folly." And he adds in a note, "It is unfortunate that some writers have introduced the fashion of calling all common terms abstract terms."—V.

A French philosopher has expressed himself on this point to the following effect: -" In every class, genus, or species, there are two things which may be conceived distinctly, the objects united in the class, and the characters which serve to unite them. Hence it follows, that under every term which represents that ideal whole which we call genus, under the term 'bird,' for example, there are two different ideas,—the idea of the number of the objects united, and the idea of the common characters; this is what is called the extension and the comprehension of general terms. Sometimes there is a word to denote the extension, and another word to denote the comprehension; as 'mortals' and 'mortality.' And this has led some philosophers to say that there are general ideas which are concrete and general ideas which are abstract—the latter referring only to the qualities which are common, and the former to the qualities and to the objects which possess them."

"The mind," says Mr Locke (Essay on Hum. Under., bk. ii. ch. 11, sec. 9), "makes particular ideas received from particular objects to become general, which is done by considering them as they are in the mind such appearances, separate from all other existences, and the circumstances of real existence as time, place, or any other concomitant ideas. This is called abstraction, whereby ideas taken from particular beings, become general representatives of all of the same kind; and their names general names applicable to whatever exists conformable to such abstract ideas."—See also bk. iv. ch. 7, sec. 9.

In reference to this, Bishop Berkeley has said (Principles of

# ABSTRACT, ABSTRACTION—

Hum. Know., Introd., sect. 10), "I own myself able to abstract ideas, in one sense, as when I consider some particular parts or qualities separated from others, with which, though they are united in some object, yet it is possible they may really exist without them. But I deny that I can abstract one from another, or conceive separately those qualities which it is impossible should exist separately; or that I can frame a general notion by abstracting from particulars as aforesaid, which two last are the proper acceptation of abstraction."

"It seems to me," says Mr Hume (Essays, p. 371, n. c. edit., 1758), "not impossible to avoid these absurdities and contradictions" (see his Essay on Sceptical Philosophy), "if it be admitted that there are no such things as abstract in general ideas, properly speaking, but that all general ideas are in reality particular ones attached to a general term which recalls, upon occasion, other particular ones that resemble in certain circumstances the idea present to the mind. Thus, when the term 'horse' is pronounced, we immediately figure to ourselves the idea of a black or white animal of a particular size or figure; but as that term is also used to be applied to animals of other colours, figures, and sizes, their ideas, though not actually present to the imagination, are easily recalled, and our reasoning and conclusion proceed in the same way as if they were actually present."

In reference to the views of Berkeley and Hume which are supported by S. Bailey in *Letters on Phil. Hum. Mind*, see Dr Reid (*Intell. Powers*, essay v. ch. 6).

The Rev. Sidney Smith (Lectures on Mor. Phil., lect. iii.) mentions an essay on Abstraction by Dumarsais, and calls it an admirable abridgment of Locke's Essay.—V. COMMON, CONCRETE, GENERALIZATION.

ABSTRACTIVE (KNOWLEDGE) and INTUITIVE. (Cognitio abstractiva, Cognitio intuitiva.) In the scholastic philosophy, the form applies to all representations of objects by the imagination or memory, as well as to what is more properly abstract knowledge.

The knowledge of the Deity has been distinguished into abstractive and intuitive. By the former mode, God knows all things possible, whether they are actually to happen or not. By the latter He knows things future as if they were

ABSTRACTIVE (KNOWLEDGE) and INTUITIVE-

actually beheld by him.—Baronius, Metaphys., sec. 12, disput. ii.; Hamilton's Reid, p. 812; Mill's Exam. of Hamilton's

Philos., 336, 3d ed. 392, note.

ABSURD (ab surdo, a reply from a deaf man who has not heard what he replies to, or, according to Vossius, that which should be heard with deaf ears) properly means that which is logically contradictory; as, a triangle with four sides. What is contrary to experience merely cannot be called absurd, for experience extends only to facts and laws which we know; but there may be facts and laws which we have not observed and do not know, and facts and laws not actually manifested may vet be possible.—V. ARGUMENT (INDIRECT).

ACADEMY and ACADEMICS.— Ακαδήμεια (οτ 'Ακαδήμια). academy, the name of the garden or gymnasium in which Plato taught, has been used to describe his philosophy. successive Platonic schools have been named the Academies,

their teachers, the Academics.—Ed.]

Academus or Hecademus left to the inhabitants of Athens a piece of ground for a promenade; Hipparchus, son of Pisistratus, enclosed it with walls; Cimon, son of Miltiades, planted it with trees. Plato assembled his disciples in it, hence they

were called Academics.—Biograph. Univers.

The Academic school embraces a period of four ages, from Plato to Antiochus. Some admit three Academies-first, the old, that of Plato, 388 B.C.; middle, that of Arcesilas, 244 B.C.; new, that of Carneades and Clitomachus, 160 B.C. these some add a fourth, that of Philon and Charmides, and a fifth, that of Antiochus. But Plato, and his true disciples, Speusippus and Xenocrates, should not be classed with these semi-sceptics, whose characteristic doctrine was 70 πιθανόν, or the probable.

There are some philosophers who have made denying their profession, and who have even established on that foundation the whole of their philosophy; and amongst these philosophers, some are satisfied with denying certainty, admitting at the same time probability, and these are the New Academics: the others, who are the Pyrrhonists, have denied even this probability, and have maintained that all things are equally certain and uncertain."—Port. Roy. Log., part iv.

ch. 1.

# ACADEMY and ACADEMICS-

See Vossius (De Philosophorum Seetis, 1657); Foucher (Dissertatio de Phil. Aeadem., 12, Paris, 1692); Gerlach (Commentatio Exhibens de Probabilitate Disputationes, 4to, Goett.; Archer Butler's Leets. on Ancient Philos., 4th series.

ACATALEPSY (α, privative; and κατάληψις, comprehensio, incomprehensibility) is the term employed by Bacon (Adv. of Learning, Moffet's trans., p. 140) to denote the doctrine held by the ancient academies and sceptics that human knowledge never amounts to certainty, but only to probability. "Their chief error," says Bacon, "lay in this, that they falsely charged the perceptions of the senses." Hence he says (Novum Organum, bk. i. aphor. 126), "We do not meditate or propose acatalepsy, but eveatalepsy, for we do not derogate from sense, but help it, and we do not despise the understanding, but direct it." Arcesilas, chief of the second Academy, taught that we know nothing with certainty, in opposition to the dogmatism of the Stoics, who taught κατάληψις, or the possibility of seizing the truth. All sceptics and Pyrrhonians were called Acataleptics.—V. Academics.

ACCIDENT (aecido, to happen) is a modification or quality which does not essentially belong to a thing, nor form one of its constituent and invariable attributes; as motion in relation to matter, or heat to iron. The scholastic definition of it is ens entis or ens in alio, while substance was defined to be ens per se.

"Accident, in its widest technical sense (equivalent to attribute) is anything that is attributed to another, and ean only be conceived as belonging to some substance (in which sense it is opposed to substance); in its narrower and more properly logical sense, it is a predicable which may be present or absent, the essence of the species remaining the same; as for a man to be 'walking,' or 'a native of Paris.'—Whately, Log., bk. ii. eh. 5, sec. 4, and index; Aristotle (Metaphys., lib. iv. cap. 30).—V. Substance, Phenomenon.

ACOSMIST (α, priv., and κόσμος, world). [One who theoretically denies the existence of the universe, as distinct from the Absolute Being.—Ed.] "Spinoza did not deny the existence of God; he denied the existence of the world; he was consequently an acosmist, and not an atheist."—Lewes, Biograph. Hist. of Philosophy, p. 1.

#### ACOSMIST-

"It has of late been a favourite criticism of Spinoza to say with Hegel, that his system is not atheism but acosmism; and this is true in a speculative point of view. But if I allow of no God distinct from the aggregate of the universe, myself included, what object have I of worship? Or if, according to the latter manifestations of pantheism, the Divine mind is but the sum total of every finite consciousness, my own included, what religious relation between God and man is compatible with the theory? And, accordingly, the pantheism of Hegel has found its natural development in the atheism of Feuerbach."—Mansel, Prolegom. Log., p. 279, note.

ACROAMATICAL (from ἀκροάομαι, to hear). [Designed for the hearing of the initiated, applied to the lessons which were Esoteric (ἐσωτερικὸς) in contrast with the Exoteric, those given to general audiences, (ἐξωτερικὸς).—Ed.] "Aristotle was wont to divide his lectures and readings into Acroamatical and Exoterical; some of them contained only choice matter, and they were read privately to a select auditory; others contained but ordinary stuff, and were promiscuously, and in public, exposed to the hearing of all that would."—Hales, Golden Remains (On John xviii. 36).—V. Exoteric.

"In the life of Aristotle, by Mr Blakesley" (published in the Encyclop. Metrop.), "it has been shown, we think most satisfactorily, that the acroamatic treatises of Aristotle differed from the exoteric, not in the abstruseness or mysteriousness of their subject-matter, but in this, that the one formed part of a course or system, while the other were casual discussions or lectures on a particular thesis."—Mor. and Met. Phil., by Maurice, note, p. 165.

Some of the early Fathers adopted a similar distinction in giving instructions to the Catechumens, beginners ( $\varkappa \alpha \tau^* \tilde{n} \varkappa o \varsigma$ , according to sound—viva voce instruction), and the Teleioi (finished, or thoroughly instructed, from  $\tau \acute{\epsilon} \lambda o \varsigma$ , an end). This corresponds to the difference between the written law and the traditions of the elders.

Plutarch (in Alexand.) and Aulus Gellius (l. xx. c. 4) maintain that the acroamatic works had natural philosophy and logic for their subjects, whereas the exoteric treated of rhetoric, ethics, and politics. Strabo (l. 13, p. 608), Cicero (Ad Atticum., 13, 19), and Ammonius Herm. (Ad Categor. Aristot.),

# ACROAMATICAL-

maintain that they were distinguished, not by difference of subject, but of form; the acroamatic being discourses, the exoteric dialogues. Simplicius (Ad Categor. in Procm.) thus characterizes the acroamatic in contradistinction to the exoteric works, "distinguished by pregnant brevity, closeness of thought, and quickness of transitions," from his more expanded, more perspicuous, and more popular productions.

Buhle has a Commentatio de Libris Arist., Exot. ct Acroam., in his edit. of the works of Aristotle, 5 vols., 8vo, Deux Ponts,

1791, pp. 142, 143.

ACT. [In its widest sense, Any exercise of vital energy.—Ed.] Act in Metaphysics and in Logic is opposed to power. Power is simply a faculty. Act is the exercise of a power. We cannot conclude from power to act; a posse ad actum; but from act to power the conclusion is good. Ab actu ad posse valct illatio.

An act is Immanent or Transient. An immanent act is one which continues in the agent, not being directed to any other object; as when a man loves himself. A transient act passes from the agent to some other object; as when a man loves his friend.

An act of the will is *Elicit* or *Imperate*. *Elicit* is an act produced immediately by the will, and contained within it, as *velle* and *nolle*, to determine to do or not to do.

Imperate, is a movement of body or mind following on a determination of will, as running after or running away, attending or not attending. Also an act done by others, when we order it.

ACTION.—"The word action is properly applied to those exertions which are consequent on volition, whether the exertion be made on external objects, or be confined to our mental operations. Thus we say the mind is active when engaged in study."—Stewart, Outlines, No. 111.

ACTION and ACT are not synonymous. 1. Act does not necessarily imply an external result, action does. We may speak of repentance as an act, we could not call it an action. 2. An act must be individual; we may speak of a course of action. Lastly, act, when qualified, is oftener, though not universally, coupled with another substantive: action always by an adjective preceding it. We say a kind action, not an act of kind-

#### ACTION and ACT-

ness. A kind act might be admissible, though not usual, but an action of kindness is not used, though an action of great kindness might be. Deed is synonymous with act.

"Act (actum) is a thing done; action (actio) is doing: act, therefore, is an incident; an action, a process or habit; a virtuous act; a course of virtuous action."—Taylor, Synonyms.

Action, Moral [self-directed action which comes under the sweep of moral law. An overt action which possesses moral quality must have motive, act, and end.—Ed.] Such actions are distinguished, according to the manner of their being called forth, into spontaneous or instinctive, voluntary or reflective, and free or deliberate; according to the faculty from which they proceed, into physical, intellectual, and moral; and according to the nature of the action (and character of the agent), into right and wrong, virtuous or vicious, praiseworthy or blameworthy.

An action is said to be materially right, when, without regard to the end or the intention of the agent, the action is in conformity with some moral law or rule: formally right, when the end or the intention of the agent is right, and the action is not materially wrong. For a man to give his goods to feed the poor is materially right, even though he should not have charity or brotherly love, but when he has charity or brotherly love, and throws even a mite into the treasury of the poor, the action is formally right, although, in effect, it may fall short of that which is only materially right.

ACTIVE.—That which causes change is active; that which is changed is passive.—Taylor, Elements of Thought.

ACTIVITY.—V. WILL.

ACTUAL (quod cst in actu) is opposed to potential. A rough stone is a statue potentially; when chiselled, actually.

"The relation of the potential to the actual Aristotle exhibits by the relation of the unfinished to the finished work; of the unemployed carpenter to the one at work upon his building; of the individual asleep to him awake. Potentially the seed is the tree, but the grown-up tree is it actually; the potential philosopher is he who is not at this moment philosophizing; even before the battle the better general is the potential conqueror; in fact everything is potentially which possesses a principle of motion, of develop-

## ACTUAL\_

ment, or of change; and which, if unhindered by anything external, will be of itself. Aetuality or entelectly, on the other hand, indicates the perfect act, the end as gained, the completely actual (the grown-up tree, e.g., is the entelectly of the seed-corn), that activity in which the act and the completeness of the act fall together, e.g., to see, to think where he sees and he has seen, he thinks and he has thought (the acting and the completeness of the act), are one and the same, while in these activities which involve a becoming, e.g., to learn, to go, to become well, the two are separated."—Schwegler, Hist. of Phil. (Stirling), p. 108.

Actual is also opposed to virtual. The oak is shut up in the acorn virtually. Actual is also opposed to real. My will, though really existing as a faculty, only begins to have an actual existence from the time that I will anything.—V. REAL, VIRTUAL.

ACTUS PRIMUS (in scholastic philosophy)—est rei esse, or aetus quidditativus.

ACTUS SECUNDUS—est rei operari, or actus entitativus.

ADAGE (ad agendum aptum)—a practical saying, fit for use, a rule of action. "From the Latin adagium, a saying handed down from antiquity, comes the English adage, which denotes an antique proverb."—Taylor, Synonyms. On the disagreement and similitude between adagies, apophthegms, and moral Γνωμαι, see Erasmus, in the Prolegomena to his Adagia.

ADEPT (adipiscor, to attain). Among alchemists those who were said to have found the panacea, a universal medicine, and the philosopher's stone were called adepts, adepti.

ADEQUATE (adequo, to equal), is applied to our cognitions and ideas. Our knowledge of an object is adequate or complete when it extends to all the properties of that object. An idea is adequate when it is conformable to the nature of the object which it represents.

ADJURATION (from ad-juro, to put upon oath). [A solemn appeal, under sanction of the forms of justice.—Ed.] "Our Saviour, when the high priest adjured him by the living God, made no scruple of replying upon that adjuration."—Clarke, Works, vol. ii. ser. 125.

ADMIRATION.—[Delight in contemplation of an object.—Ed.] "We shall find that admiration is as superior to surprise and

## ADMIRATION-

wonder, simply considered, as knowledge is superior to ignorance; for its appropriate signification is that act of the mind by which we discover, approve, and enjoy some unusual species of excellence."—Cogan, On the Passions, part i. ch. 2; Buckle, Hist. of Civilisation, ii. 188.

ADORATION.—To adore (from the Latin ad oro), signifies, to carry to the mouth; as in order to kiss one's hand, the hand is carried to the mouth; but it also includes in this action a sense of veneration or worship.

ADSCITITIOUS (from ad-scisco, to seek after), that which is added or assumed. "You apply to your hypothesis of an adscititious spirit, what he (Philo) says concerning this πυεῦμα θεῖου, divine spirit or soul, infused into man by God's breathing."—Clarke, Letter to Dodwell.

ÆSTHETICS (αἴσθησις, perception or feeling).

The science of the beautiful and the philosophy of the fine arts. Various theories have been entertained as to the idea of the beautiful, by Plato, Plotinus, and Augustine. In modern times, the term esthetics was first used in a scientific sense by A. Baumgarten, a disciple of Christian Wolf. In his Æsthetica, 2 vols. 8vo, Frankf., 1750-8, he considered the idea of the beautiful as an indistinct perception or feeling accompanying the moral ideas. Mendelssohn and others identified the idea of the beautiful with the idea of the good. Shaftesbury and Hutcheson regarded the two ideas as intimately connected. At the close of the eighteenth century, asthetics was scientifically developed in Germany by Kant, and has been zealously prosecuted by Fichte, Schelling, and Hegel. It is generally treated as a branch of science in the German Universities. Besides the writings of these philosophers, consult Cours d'Esthetique, par Ph. Damiron, 8vo, Paris, 1842; The Philosophy of the Beautiful, by John MacVicar, D.D., Edin., 1855; Reid, Intell. Pow., essay viii. ch. 4.—V. BEAUTY. IDEAL (BEAU).

AETIOLOGY (αἰτία, cause; λόγος, discourse), a philosophy of causes. In Rhetoric, the form of speech in which the reason is given, along with a statement made.

AFFECTION.—[Inclination of the nature towards another, regarded either as good, or evil. The term is sometimes used in the general sense, conscious sensibility, the experience of

# AFFECTION-

the mind, as when the physical nature is affected by some external object.—Ed.] The Affections are usually distinguished into benevolent, as esteem, gratitude, friendship; and male-

volent, as hatred, envy, jealousy, revenge.

"There are various principles of action in man which have persons for their immediate object, and imply, in their very nature, our being well or ill affected to some person, or at least to some animated being. Such principles I shall call by the general name of affections, whether they dispose us to do good or hurt to others."—Reid, Act. Pow., essay iii. part ii. ch. 3-6.

This term is applied to all the modes of the sensibility, or to all states of mind in which we are purely passive. By Descartes (*Traité des Passions*, art. 83) it is employed to denote some degree of love.—V. LOVE, SENSIBILITY.

AFFINITY is a relation contracted by, or resulting from, marriage; in contradistinction to consanguinity, or relation by

blood.

AFFIRMATION (κατάφασις) is the attributing of one thing to another, or the asserting that something exists. A mental affirmation is a judgment; expressed, it becomes a proposition.

In law, affirmation is opposed to oath. Some having scruples as to the lawfulness of oath-taking are allowed to make a solemn affirmation that what they say is true; and if they make a false affirmation, they are liable to the penalties of perjury.

"A man affirms what he declares solemnly; he confirms what aids another to prove."—Taylor, Synonyms.

A FORTIORI.—Argument from the greater to the less.

AGENT (ago, to act), one who acts, also in a loose sense, that which operates. "Nor can I think that anybody has such an idea of chance as to make it an agent."—Wollaston, Relig. of Nat., 8, 5.

AGNOIOLOGY (λόγος τῆς ἀγνοίας, theory of true ignorance), a section of Philosophy intermediate between Epistemology and Ontology. "Absolute Being may be that which we are ignorant of. We must, therefore, examine and fix what ignorance is, what we are, and can be ignorant of."—Ferrier, Metaph., 48.

ALCHEMY or ALCHYMY (al, the article, -kimia, black, the black art; or form χύμα, what is poured, according to Vossius), that branch of chemistry which proposed to transmute metals into gold, to find the panacea or universal remedy, &c. See Albertus Magnus, "De Alchemia;" Louis Figuier, L'Alchemie et Les Alchemistes, Paris, 1850.—V. HERMETIC PHILOSOPHY, ROSICRUCIAN.

ALLEGORY (ἄλλο ἀγορεύειν, to say another thing), says Quintilian, exhibits one thing in words and another in meaning.

"An Allegory is a continued metaphor. It consists in representing one subject (object) by another analogous to it; the subject thus represented is not formally mentioned, but we are left to discover it by reflection; and this furnishes a very pleasant exercise to our faculties. A metaphor explains itself by the words which are connected with it in their proper and natural meaning. When I say, 'Wallace was a thunderbolt of war,' In peace Fingal was the gale of spring,' the thunderbolt of war and the gale of spring are sufficiently explained by the mention of Wallace and Fingal. But an allegory may be allowed to stand more unconnected with the literal meaning; the interpretation is not so directly pointed out, but is left to our own discovery."

—Irving, English Composition, p. 189.—V. Metaphor, Myth.

AMBITION (from ambio, to go about seeking place or power), the desire of power, which is regarded as one of the primary or original desires of human nature. See Reid, Act. Pow., essay iii. part 2, ch. 2; Stewart, Act. Pow., bk. i. ch. 2, sec. 4.

AMPHIBOLOGY (ἀμφιβολία, ambiguity), use of a proposition which is not obscure, but of a doubtful or double sense. Aristotle distinguishes it from equivocatio, ὁμωνυμία, by which he understands ambiguity in terms taken separately.—V. Fallacy.

AMPHIBOLY is applied by Kant to that kind of amphibology which consists in confounding pure notions of the understanding with objects of experience, and attributing to the one characters and qualities which belong to the other; as when we make *identity*, which is a notion à priori, a real quality of phenomena, or objects which experience makes known to us. [Kant's Critique of Pure Reason, Transc. Analytic, ch. iii.]

ANALOGUE (ἀνάλογος, proportionate).—"By an Analogue is meant an organ in one animal having the same function as a different organ in a different animal. The difference between Homologue and Analogue may be illustrated by the wing of a bird and that of a butterfly: as the two totally differ in anatomical structure, they cannot be said to be homologous, but they are analogous in function, since they both serve for flight."—M'Cosh, Typical Forms, p. 25.

In Logic a term is analogous whose single signification applies with equal propriety to more than one object—as the leg of the table, the leg of the animal.—Whately, Log.,

bk. iii. sec. 10.

is a defensive argument drawn from similarity of phenomena recognised in different relations. It is not constructive in nature, being competent only for defence, not for proof.— Ed.] It has been defined, "The similarity of ratios or relations." In popular language we extend the word to resemblances of things as well as relations. Employed as an argument, analogy depends upon the canon, the same attributes may be assigned to distinct, but similar things, provided they can be shown to accompany the points of resemblance in the things, and not the points of difference."—Thomson, Laws of Thought, p. 363, 1st ed.

"Analogy does not mean the similarity of two things, but the similarity, or sameness of two relations. There must be more than two things to give rise to two relations; there must be at least three, and in most cases there are four. Thus A may be like B, but there is no analogy between A and B: it is an abuse of the word to speak so, and it leads to much confusion of thought. If A has the same relation to B which C has to D, then there is an analogy. If the first relation be well known, it may serve to explain the second, which is less known; and the transfer of name from one of the terms in the relation best known to its corresponding term in the other, causes no confusion, but on the contrary tends to remind us of the similarity that exists in these relations, and so assists the mind instead of misleading it."—Coplestone, Four Discourses, p. 122, 8vo, London, 1821.

"Analogy implies a difference in sort, and not merely in degree; and it is the sameness of the end with the difference

## ANALOGY-

of the means which constitutes analogy. No one could say the lungs of a man were analogous to the lungs of a monkey. but any one might say that the gills of a fish and the spiracula of insects are analogous to lungs."—Coleridge, Physiology of

"When some course of events seems to follow the same order with another, so that we may imagine them to be influenced by similar causes, we say there is an analogy between them. And when we infer that a certain event will take place in some other case of a similar nature, we are said to reason from analogu: as when we suppose that the stars, like the sun, are surrounded with planets, which derive from them light and heat. The word analogy is employed with strict propriety only in those cases where there is supposed to be a sameness in the causes of similar effects."—Taylor, Elements of Thought.

"The meaning of analogy is resemblance, and hence all reasoning from one case to others resembling it might be termed analogical; but the word is usually confined to cases where the resemblance is of a slight or indirect kind. We do not say that a man reasons from analogy when he infers that a stone projected into the air will fall to the ground. The circumstances are so essentially similar to those which have been experienced a thousand times, that we call the cases identical, not analogical. But when Sir Isaac Newton, reflecting on the tendency of bodies at the surface of the earth to the centre, inferred that the moon had the same tendency, his reasoning, in the first instance, was analogical.

"By some writers the term has been restricted to the resemblance of relations; thus knowledge is said to bear the same relation to the mind as light to the eye-to enlighten it. But although the term is very properly applied to this class of resemblances, I think it is not generally confined to them."-Sam. Bailey, Discourses, p. 181, 8vo, London, 1852.

"As analogy is the resemblance of ratios (or relations), two things may be connected by analogy, though they have in themselves no resemblance; thus as a sweet taste gratifies the palate, so does a sweet sound gratify the ear, and hence the same word, 'sweet,' is applied to both, though no flavour can

# ANALOGY-

resemble a sound in itself. To bear this in mind would serve to guard us against two very common errors in the interpretation of the analogical language of Scripture:—1. The error of supposing the things themselves to be similar, from their bearing similar relation to other things; 2. The still more common error of supposing the analogy to extend further than it does, or to be more complete than it really is, from not considering in what the analogy in each case consists."—Whately.

"Analogy is a Greek word used by mathematicians to signify a similitude of proportions. For instance, when we observe that two is to six as three is to nine, this similitude or equality of proportion is termed analogy. And although proportion strictly signifies the habitude or relation of one quantity to another, yet, in a looser and translated sense, it hath been applied to signify every other habitude, and consequently the term analogy, all similitude of relations or habitudes whatsoever. Hence the schoolmen tell us there is analogy between intellect and sight; for a smuch as intellect is to the mind what sight is to the body: and that he who governs the state is analogous to him who steers a ship. Hence a prince is anologically styled a pilot, being to the state as a pilot is to his vessel.\* For the further clearing of this point, it is to be observed, that a twofold analogy is distinguished by the schoolmen metaphorical and proper. Of the first kind there are frequent instances in Holv Scripture, attributing human parts and passions to God. When He is represented as having a finger, an eve, or an ear; when He is said to repent, to be angry, or grieved, every one sees the analogy is merely metaphorical; because these parts and passions, taken in the proper signification, must in every degree necessarily, and from the formal nature of the thing, include imperfection. When, therefore, it is said the finger of God appears in this or that event, men of common sense mean no more, but that it is as truly ascribed to God, as the works wrought by human fingers are to manl; and so of the rest. But the case is different when wisdom and knowledge are attributed to God. Passions and senses, as such, imply defect; but in knowledge simply, or as such.

<sup>\*</sup> Vide Cajetan, de Nom, Analog., c. iii.

ANALOGY-

there is no defect. Knowledge, therefore, in the proper formal meaning of the word, may be attributed to God proportionally, that is, preserving a proportion to the infinite nature of God. We may say, therefore, that as God is infinitely above man, so is the knowledge of God infinitely above the knowledge of man, and this is what Cajetan calls analogia proprie facta.—And after the same analogy we must understand all those attributes to belong to the Deity, which in themselves simply, and as such, denote perfection."

-Berkeley, Min. Philosoph., Dialog. 4.

Analogy and Metaphor.—Metaphor, in general, is a substitution of the idea or conception of one thing with the term belonging to it, to stand for another thing, on account of an appearing similitude only, without any real resemblance and true correspondency between the things compared; as when the Psalmist describes the verdure and fruitfulness of valleys by laughing and singing. Analogy, in general, is the substituting the idea or conception of one thing to stand for and represent another, on account of a true resemblance and correspondent reality in the very nature of the things compared. It is defined by Aristotle 'Isótns του λόγου, an equality or parity of reason, though, in strictness and truth, the parity of reasoning is rather built on the similitude, and analogy, and consequent to them, than the same thing with them.

"The ground and foundation of *Metaphor* consists only in an appearing or imaginary resemblance and correspondency; as when God is said to have hands, and eyes, and ears. But the foundation of analogy is an actual similitude and a real correspondency in the very nature of things; which lays a foundation for a parity of reason even between things different in nature and kind; as when God is said to have

knowledge, power, and goodness.

"Metaphor is altogether arbitrary, and the result merely of imagination, it is rather a figure of speech than a real similitude and comparison of things; and, therefore, is properly of consideration in rhetoric and poetry. But analogy being built on the very nature of things themselves, is a necessary and useful method of conception and reasoning; and, therefore, of consideration in Physics and Metaphysics."—Brown, Divine Analogy, p. 2.

# ANALOGY and METAPHOR-

"I am not of the mind of those speculators who seem assured that all states have the same period of infancy, manhood, and decrepitude that are found in individuals. Parallels of this sort rather furnish similitudes to illustrate or to adorn, than supply analogies from whence to reason. The objects which are attempted to be forced into an analogy are not found in the same classes of existence. Individuals are physical beings—commonwealths are not physical, but moral essences."—Burke, Letters on Regieide Peace, bk. iv.

Many fallacies become current through false metaphorical analogies. See an example of false analogy (Butler, Analogy, part i. ch. 7), in the supposed likeness between the decay

of vegetables and of living creatures.

Analogy and Example.—Analogy is not unfrequently used to mean mere similarity. But its specific meaning is similarity of relations, and in this consists the difference between the argument by example and that by analogy,—that in the one we argue from mere similarity, from similarity of relations in the other. In the one we argue from Pisistratus to Dionysius, who resembles him; in the other, from the relation of induction to demonstration, to the corresponding relation of the example to the enthymeme.—Karslake, Aids to Log., vol. ii. p. 74.

Analogy and Experience.—" Experience is not the mere collection of observations; it is the methodical reduction of them to their principles . . . Analogy supposes this, but it goes a step farther. Experience is mere analysis. Analogy involves also a synthesis. It is applied to cases in which some difference of circumstances is supposed; as, for instance, in arguing from the formation of particular parts of one class of animals to the correspondence in another, the different nature, habits, circumstances, of the one class, are considered and allowed for, in extending the given observation."—Hampden, Introd. Mor. Phil., lect. v.

In the Schools, what was termed the analogy of faith (see Rom. xii. 6), was showing that the truth of one scripture is not repugnant to the truth of another, or of the whole. "Analogia vero est, cum veritas unins scripture ostenditur veritati alterius non repugnare."—Thom. Aquinas, Summ. Theolog., pars prima, quest. i. art. 10.

# ANALOGY and EXPERIENCE-

In Logic, three modes of reasoning are called analogical.—1. From effect to cause, or from cause to effect. 2. From means to ends, or from ends to means. 3. From mere resemblance or concomitance. Condillac (Art de Raissoner) has shown how these modes of reasoning all concur to prove that the human beings around us, who are formed like ourselves (analogy of resemblance), who act as we act (analogy of cause), who have the same organs (analogy of means), should be in all respects like ourselves, and have the same faculties.

Anslogy and Induction.—"There are two requisites in order to every analogical argument:—1. That the two several particulars concerned in the argument should be known to agree in some one point; for otherwise they could not be referable to any one class, and there would consequently be no basis to the subsequent inference drawn in the conclusion. 2. That the conclusion must be modified by a reference to the circumstances of the particular to which we argue. For herein consists the essential distinction between an analogical and an inductive argument."—Hampden, Essay on Phil. Evid. of Christianity, pp. 60-64.

Locke, On Hum. Understand., bk. iv. ch. 16, sec. 12; Beattie's Essay on Truth, part i. ch. 2, sec. 7; Stewart's Elements, vol. ii. ch. 4, sec. 4; Stewart's Essays, v. c. 3.

ANALYSIS and SYNTHESIS (ἀνά λύω, σύν τίθημι, resolutio. compositio), or decomposition and recomposition. [In mental philosophy, the resolution of our experience into its simple or original elements, and the reconstruction of these with full regard to their relations in the mental state to which they belong.—Ed.] Objects of sense and of thought are presented to us in a complex state, but we can only, or at least best, understand what is simple. Among the varied objects of a landscape, I behold a tree, I separate it from the other objects. I examine separately its different parts-trunk, branches, leaves, &c., and then reuniting them into one whole I form a notion of the tree. The first part of this process is analysis, the second is synthesis. If this must be done with an individual, it is more necessary with the infinitude of objects which surround us, to evolve the one out of many, to recall the multitude to unity. We compare objects with one another to see wherein they agree; we next, by a synthetical

## ANALYSIS and SYNTHESIS-

process, infer a general law, or generalize the coincident qualities, and perform an act of induction which is purely a synthetical process, though commonly called analytical. It is the mind which connects these things, and the process is synthetical. This is the one universal method in all philosophy, and different schools have differed only in the way of employing it. Method is the following of one thing through another. Order is the following of one thing after another. Analysis is real, as when a chemist separates two substances. Logical, as when we consider the properties of the sides and angles of a triangle separately, though we cannot think of a triangle without sides and angles. [Psychological when we distinguish the elements which constitute a state of consciousness.]

For an explanation of the processes of analysis and synthesis, see Stewart, Elements, part ii. ch. 4.

The instruments of analysis are obscrvation and experiment; of synthesis, definition, and classification.

"Hae analysi licebit, ex rebus compositis ratioeinatione colligere simplices; ex motibus, vires moventes; et in universum, ex effectis causas; ex causisque particularibus generales; donec ad generalissimas tandem sit deventum."—Newton, Optices, 2d edit. p. 413.

Analysis is decomposing what is compound to detect its elements. Objects may be compound, as consisting of several distinct parts united, or of several properties equally distinct. In the former view, analysis will divide the object into its parts, and present them to us successively, and then the relations by which they are united. In the second case, analysis will separate the distinct properties, and show the relations of every kind which may be between them.—Cardaillac, Etudes Element., tom. i. pp. 8, 9.

Analysis is the resolving into its constitutent elements of a compound heterogeneous substance. Thus, water can be analyzed into oxygen and hydrogen, atmospheric air into these and azote.—Peemans, Introd. ad Philosoph., p. 75, 12mo, Loyan., 1840.

Abstraction is analysis, since it is decomposition, but what distinguishes it is that it is exercised upon qualities which by themselves have no real existence. Classification is

## ANALYSIS and SYNTHESIS-

synthesis. Induction rests upon analysis. Deduction is a synthetical process. Demonstration includes both.

ANALYTICS (Tà 'Aradutica) is the title which in the second century was given, and which has since continued to be applied, to a portion of the Organon or Logic of Aristotle. This portion consists of two distinct parts; the First Analytics, which teaches how to reduce the syllogism to its diverse figures and most simple elements, and the Posterior Analytics, which lays down the rules and conditions of demonstration in general. It was in imitation of this title that Kant gave the name of Transcendental Analytic to that part of the Criticism of Pure Reason which reduces the faculty of knowing to its elements.

ANIMA MUNDI (soul of the world),—Animism is the doctrine of the anima mundi as held by Stahl. The hypothesis of a force, immaterial, but inseparable from matter, and giving to matter its form and movement, is coeval with the birth of philosophy. Pythagoras obscurely acknowledged such a force, but held that there was an infinitely perfect being above it. From Pythagoras it passed into the system of Plato, who could not conceive how pure spirit, the seat of eternal ideas, could act directly upon matter. He thought also that the world would be more perfect if endowed with life. The soul of the world was the source of all life, sensibility, and movement. The school of Alexandria adhered to the views of Plato, and recognized intelligence and Deity as above the anima mundi, which in the system of the Stoics usurped the place of God, and even His name; while Straton of Lampsacus called it nature. The hypothesis of the anima mundi was not entertained by the scholastic philosophers. But it reappeared under the name of Archaus, in the systems of Cornelius Agrippa, Paracelsus, and Van Helmont: while Henry More recognized a principium hylarchicum, and Cudworth a plastic nature, as the universal agent of physical phenomena, the cause of all forms of organization, and the spring of all the movements of matter. About the same time, some German divines, as Amos Comenius and John Bayer, attempted to rest a similar opinion on Genesis i. 2, and maintained that the spirit which moved on the face of the

## ANIMA MUNDI-

waters still gives life to all nature.—Buddeus, Elem. Phil., pars 3, cap. 6, sec. 11, 12, et seg.

The doctrine of the anima mundi, as held by the Stoics and Stratonicians, is closely allied to pantheism; while according to others this soul of the universe is altogether intermediate between the Creator and His works.

See Plato, Timeus, 29 D.—30 c; Bonitz, De anime mundane apud Platonem elementis, 8vo, Lips., 1837; Schelling, De l'Ame de Monde, 8vo, Hamb., 1809.

[ANIMISM.—A doctrine of soul as distinct from body, and separated from it at death. For the extent to which such a doctrine is believed among uncivilized tribes, v. Tyler's Primitive Culture.—Ed.]

ANTECEDENT (antecedo, to go before).—"And the antecedent shall you fynde as true when you rede over my letter as himself can not say nay, but that the eonseeusyon is formal."—Sir T. More's Works, p. 1115.

In a relation, whether logical or metaphysical, the first term is the antecedent, the second the consequent. Thus in the relation of causality—the cause is the antecedent, and the effect the consequent. In Grammar, the antecedent is that to which the relative refers.

In Logic, antecedent is the former of two propositions, in a species of reasoning, which, without the intervention of any middle proposition, leads directly to a fair conclusion; and this conclusion is termed the consequent. Thus, I reflect, therefore I exist. I reflect, is the antecedent—therefore I exist, is the consequent.—Euler, Letters to a German Princess.—V. Proposition Hypothetical.

Antecedent is that part of a conditional proposition on which the other depends."—Whately, Log., bk. ii. ch. 4, sec. 6.

ANTHROPOLOGY (ἄνθρωπος and λόγος, the science of man).—
Among naturalists it means the natural history of the human species. According to Dr. Latham (Nat. Hist. of Varieties of Man, Lond., 1830), anthropology determines the relations of man to the other mammalia; ethnology, the relations of the different varieties of mankind to each other, p. 559. Otto Casmann, about 1596, gave the name Anthropologia to the science of man in general, which he divided into two parts—the first Psychologia, the doctrine of the human mind;

## ANTHROPOLOGY-

the second Sematologia, the doctrine of the human body; and these still continue to be the usual appellations of these branches of knowledge in Germany.—Sir W. Hamilton, Lect. I. p. 136. The German philosophers since the time of Kant have used it to designate all the sciences which in any point of view relate to man—soul and body—individual and species—facts of history and phenomena of consciousness—rules of morality as well as interests material, and changing; so that works under the general title of anthropology treat of very different topics.

"Anthropology is the science of man in all his natural variations. It deals with the mental peculiarities which belong specifically to different races, ages, sexes, and temperaments, together with the results which follow immediately from them in their application to human life."—Morell,

Psychology, p. 1.

In an anonymous work entitled Anthropologie Abstracted, 8vo, Lond., 1655, Anthropology is divided into Psychology and Anatomy.

ANTHROPOMORPHISM (ἀνθεωπος, man; μος φή, form).—
[A theory which represents Divine attributes as only human attributes enlarged. In modern times, the name has been restricted to theories which attribute the characteristics of the human mind to the Divine mind.—Ed.] "It was the opinion of the Anthropomorphites that God had all the parts of a man, and that we are, in this sense, made according to his image."—More, Def. of Cabbala, c. 1.

Melito, of Sardis, was the first Christian writer who ascribed body to Deity. The ascribing of bodily parts or members to Deity is too gross a delusion to call for refutation. It is wittily exposed by Cicero, De Nat. Deor., lib. i. cap. 27. But there is a spiritual anthropomorphism, sometimes also called anthropopathy, which ascribes to him the acts, passions, sentiments, and proceedings of human nature.

"We ought not to imagine that God is clothed with a human body, as the *Anthropomorphites* asserted, under colour that that figure was the most perfect of any."—Malebranche.

Search after Truth, bk. iii. ch. 9.

Hume applies the name to those who think the mind of God is like the mind of man.—Dial. on Nat. Relig., parts iv., v.

ANTICIPATION (anticipatio, πρόληψις).—The power of the mind to project itself from the known into the unknown, in the expectation of finding what it is in search of. term was first used by Epicurus to denote a general notion which enables us to conceive beforehand of an object which had not yet come under the cognizance of the senses. these general notions being formed by abstraction from a multitude of particular notions, were all originally owing to sensation, or mere generalizations à posteriori. Buhle (Hist. de la Phil. Mod., tom. i. pp. 87, 88) gives the following account :- "The impressions which objects make on the senses, leave in the mind traces which enable us to recognize these objects when they present themselves anew, or to compare them with others, or to distinguish them. When we see an animal for the first time, the impression made on the senses leaves a trace which serves as a type. If we afterwards see the same animal, we refer the impression to the type already existing in the mind. This type and the relation of the new impression to it, constituted what Epicurus called the anticipation of an idea. It was by this anticipation that we could determine the identity, the resemblance or the difference of objects actually before us, and those formerly observed."

The language of Cicero (De Nat. Dcor., lib. i., cap. 16) seems to indicate that by Epicurus the term πρόληψις was extended to what is supersensual, and included what is now called knowledge a priori. "Quæ est enim gens, aut quod genus hominum, quod non habcat, sine doctrina, anticipationem quandam Deorum? quam appellat πρόληψιν Epicurus, idest, anteceptam animo rei quandam informationem, sine qua nec intelligi quidquam, ncc quæri, nec disputari potest." And according to Diogenes Laertius (lib. vii. sec. 51, 53, 54), the Stoics defined πρόληψις to mean "a natural conception of the universal." It would appear, however, that this definition was not adopted by all. And Sir W. Hamilton has said (Reid's Works, note A, p. 774):-" It is not to be supposed that the zοιναί εννοιαι, φυσικαί προλήψεις, of the Stoics, far less of the Epicureans, were more than generalizations à posteriori. Yet this is a mistake, into which, among many others, Lipsius and Leibnitz have fallen in regard to the former," See Manuductio ad Stoicam Phil., lib. ii. dissert.

### ANTICIPATION-

11; and Leibnitz, Nouveaux Essais, Pref. See also Kernius, Dissert. in Epicuri πρόληψω, &c., Goett., 1736; Bacon's Nov. Org. Pref.; Thompson's Laws of Thought.—[J. S. Mill on Expectation, Exam. of Hamilton's Philo., ch. xi.]

ANTINOMY (ἀντί, against; νόμος, law), the opposition of one law or rule to another law or rule. [In Kant's philosophy, the conflict or self-contradiction (held by Kant to be inevitable) which emerges when the Reason deals with problems concerning the universe. The conflict is complete, and the Reason is unable to settle the dispute.—Ed.]

"If he once willed adultery should be sinful, all his omnipotence will not allow Him to will the allowance that his holiest people might, as it were, by His own antinomy or counter statute, live unreproved in the same fact as He Himself esteemed it, according to our common explainers."—Milton, Doct. and Disc. of Div., bk. ii. c. 3. Kant treats of the Antinomies in the Critique of Pure Reason (Kritik der Reinen Vernunft) under Transcendental Dialectic, bk. ii. ch. ii.; Meiklejohn's Translation, p. 266. The following are his antinomies in cosmology]:—

Thesis. I. Antithesis.

The world has an origin in time, and the world has no beginning and is quoad space shut up in boundaries.

The world has no beginning and bounds.

II.

Every compound substance in the world consists of simple parts; and parts; and there exists nowhat simple there is nothing but the simple, or in the world. that which is compounded from it.

III.

It is requisite to assume a *Free*causality to explain the phenomena in the world happens according to the world.

There is no Freedom. Everything in the world happens according to the laws of nature.

IV.

To the world there belongs somewhat which, either as its part or its cause, is an absolutely necessary being.

There exists no absolutely necessary sary Being, neither in the world nor out of the world, as its cause.

Semple, Introd. to Metaphysic of Ethics, p. 95, 8vo. ed., says,
—At the bottom of the two first antinomies lies the absurdity

## ANTINOMY-

of transferring to the world in itself predicates which can be applied only to a world of phenomena. We get rid of the difficulty by declaring that both thesis and antithesis are false. With regard to the third, an act may be in respect of the causality of reason a first beginning, while yet, in respect of the sequences of phenomena, it is no more than a subordinate commencement, and so be, in the first respect free; but in the second, as mere phenomena, fettered by the law of the causal nexus. The fourth antinomy is explained in the same manner; for when the cause qua phenomenon is contradistinguished from the cause of phenomena, so far forth as this last may be a thing in itself, then both propositions may consist together.

Others think that when the principles are carefully inducted and expressed, the contradiction disappears.—M'Cosh, Meth. of Div. Govern., p. 530, 5th edit.

ANTIPATHY (ἀντί πάθος, feeling against, dislike, aversion of feeling.) Sympathy and antipathy of plants, see Bacon, Nat. Hist. sec. 479:—of minerals and animals, Sylvester Rattray, M.D. (Aditus Novus ad Occultas Sympathiæ et Antipathiæ causas inveniendas. 12mo, Glasg., 1658.)

An involuntary dislike or aversion entertained by an animate being to some sensible object. A man may have an antipathy to particular smells or tastes, a turkey cock or bull to the colour red, a horse to the smell of raw flesh. Some are natural, others are acquired, as a surfeit of any food gives antipathy. Some are founded on sensation, others on sentiment.—Locke, On Hum. Understand. bk. ii. ch. 33. sect. 7, 8.—V. Sympathy.

# APAGOGICAL. V. OSTENSIVE.

A PARTE ANTE, and A PARTE POST.—These two expressions, from the scholastic philosophy, refer to Eternity. Man can only conceive of Eternity as consisting of two parts; the one without limits in the past, a parte ante; and the other without limits in the future, a parte post. Both are predicable of Deity; only the latter of the human soul.—V. ETERNITY.

APATHY ( $\dot{\alpha}$ , privative; and  $\pi \dot{\alpha} \theta_{05}$ , passion).—The absence of passion. As the passions are the springs of most of our actions, a state of apathy has come to signify a sort of moral

## APATHY-

inertia—the absence of all activity or energy. According to the Stoics, apathy meant the extinction of the passions by the ascendency of reason.

"What is called by the Stoics apathy, or dispassion; by the Sceptics indisturbance, &\parallel{a} \alpha \a

"By the perfect apathy which that philosophy (the Stoical) prescribes to us, by endeavouring not merely to moderate but to eradicate, all our private, partial, and selfish affections, by suffering us to feel for whatever can befall ourselves, our friends, our country, not even the sympathetic and reduced passions of the impartial spectator,—it endeavours to render us altogether indifferent and unconcerned in the success or miscarriage of everything which nature has prescribed to us as the proper business and occupation of our lives."—Smith, Theory of Moral Sentiments, part vii. sec. 2.

"In general, experience will show, that as the want of natural appetite to food supposes and proceeds from some natural disease; so the apathy the Stoics talk of, as much supposes or is accompanied with something amiss in the moral character, in that which is the health of the mind."—Butler, Sermon v.

"In lazy apathy let Stoics bosst,
Their virtue fix'd; 'tis fix'd as in a frost;
Contracted all, retiring to the breast;
But strength of mind is exercise, not rest."—Pope.

Niemeierus (Joh. Barth.), Dissert. de Stoicorum  $A\pi \acute{\alpha} \theta \epsilon \imath \alpha$ , &c. 4to, Helmst., 1679; Becnius, Dispp., lib. iii.,  $A\pi \acute{\alpha} \theta \epsilon \imath \alpha$ , Sapientis Stoici, 4to, Copenhag., 1693; Fischerus (John Hen.), Diss. de Stoicis  $\mathring{\alpha}\pi \acute{\alpha} \theta \epsilon \imath \alpha \varsigma$  falso suspectis, 4to, Leips., 1716; Quadius, Disputatio tritum illud Stoicorum paradoxon  $\pi \epsilon \rho i \tau \tilde{\eta} \varsigma$   $\mathring{\alpha}\pi \alpha \theta \epsilon \imath \alpha \varsigma$  expendens, 4to, Sedini, 1720; Meiners, Melanges, tom. ii. p. 130.

APHORISM. determinate position, from ἀτοςίζω, to bound, or limit; whence our horizon. A precise, sententious saying; e.g., "It is always safe to learn from our enemies, seldom safe to instruct even our friends."

### APHORISM-

Coleridge, Aids to Reflection, vol. i. p. 16, edit. 1848: "In order to get the full sense of a word, we should first present to our minds the visual image that forms its primary meaning. Draw lines of different colours round the different counties of England, and then cut out each separately, as in the common play-maps that children take to pieces and put together, so that each district can be contemplated apart from the rest, as a whole in itself. This twofold act of circumscribing and detaching, when it is exerted by the mind on subjects of reflection and reason, is to aphorize, and the result an aphorism."

The three ancient commentators upon Hippocrates, viz., Theophilus, Meletius, and Stephanus, have given the same definition of an aphorism, i.e., "a succinct saying, comprehending a complete statement," or a saying poor in expression, but rich in sentiment. The first aphorism of Hippocrates is, "Life is short, and the art is long; the occasion fleeting; experience fallacious, and judgment difficult. The physician must not only be prepared to do what is right himself, but also to make the patient, the attendants, and externals, co-operate."

"The first and most ancient inquirers into truth were wont to throw their knowledge into aphorisms, or short, scattered, unmethodical sentences."—Nov. Organ., bk i. sec. 86. And the Novum Organum itself is written in aphorisms.

Heraclitus is known by his aphorisms, which are among the most brilliant of those

"Jewels five words long, That on the stretched forefinger of all time, Sparkle for ever."

Among the most famous are,—War is father of all things, *i.e.*, all things are evolved by antagonistic force. No man can bathe twice in the same stream, *i.e.*, all things are in perpetual flux.

APODEICTIC, APODEICTICAL (ἀποδείκνυμι, to show).—[Demonstrative, beyond contradiction.—Ed.] "The argumentation is from a similitude, therefore not apodictick, or of evident demonstration."—Robinson, Eudoxa, p. 23.

This term was borrowed by Kant from Aristotle (Analyt. Prior., lib. i. cap. 1), who made a distinction between proposi-

# APODEICTIC, APODEICTICAL

tions which admitted of contradiction or dialectic discussion, and such as were the basis or result of demonstration. Kant, wished to introduce an analogous distinction between our judgments, and to give the name of apodeictic to such as were above all contradiction.

APOLOGUE (ἀπόλογος, fubula), "a novel story, contrived to teach some moral truth."—Johnson. [A fable or allegory.]

"It would be a high relief to hear an apologue or fable well told and with such humour as to need no sententious moral at the end to make the application."—(Shaftesbury, vol. iii. Miscell. 4, ch. 1.) The difference between a parable and an apologue is, that the former being drawn from human life requires probability in the narration; whereas the apologue being taken from inanimate things or the inferior animals, is not confined strictly to probability. The fables of Æsop are apologues.

For an admirable instance of the  $\lambda \acute{o} \gamma o \acute{s}$  or apologue, see Coleridge's Friend, where the case of the seizure of the Danish fleet

by the English is represented in this form.

APOLOGY (ἀπολογία, a defence made in a court of justice).—
We have a work of Xenophon, entitled the Apology of Socrates, and another with the same title by Plato. The term was adopted by the Christian fathers, and applied to their writings in defence of Christianity, and in answer to its opponents. About the year 125, Quadratus and Aristides presented Apologies to the Emperor Hadrian when on a visit to Athens. Tertullian addressed his Apologetic to the magistrates of Rome, the emperor Severus being then absent.

APOPHTHEGM (ἀποφθέγγομαι, to speak out plainly).—A short and pithy speech or saying, as that of Augustus, Festina lente.

The Lacedæmonians used much this mode of speaking. Plutarch has a collection entitled the Apophthegms of Kings and Generals, many of which are anecdotes; and also another entitled Laconica. Drusius (Joan. Prof. Heb. Lugd. Bat.) published in 1612, a collection of Hebrew and Arabic Apophthegms. Erasmus has a collection of Apophthegms, 12mo, Basil, 1558.

Macaulay (On Addison p. 11) blames Sir Richard Black-more because he has confounded an aphorism with an apophtheym.

## APOPHTHEGM-

In Guesses at Truth (2d series, 1848), the saying of Demosthenes "that action was the first, second, and third essential of eloquence," is called an apophthegm.

APPEARANCE [that which seems to the senses, in contrast with that which is verified. *Phenomenon*, in contrast with fact.

German, Erscheinung.—Ed.]

"By apperception he (Leibnitz) understands that degree of perception which reflects as it were upon itself; by which we are conscious of our own existence, and conscious of our perceptions, by which we can reflect upon the operation of our own minds, and can comprehend abstract truths."—Reid, Intell. Pow., essay ii. c. 15.

"By apperception the Leibnitzio-Wolfians meant the act by which the mind is conscious immediately of the representative object, and through it, mediately of the remote object represented."—Sir W. Hamilton, Reid's Works, note

D\*, sec. 1.

Apperception, according to Kant, is consciousness of one's self, or the simple representation of the I. If a subject capable of representations possesses such, it, besides, always connects with these representations that it (the subject) has them. This second representation, that I, the representing subject, have these representations, is called the consciousness of myself, or the apperception. This representation is simple, and is an effect of the understanding, which thereby connects all the diversity of a representation in a single representation, or, according to Kant's mode of expression, produces a synthesis."—Haywood, Critick of Pure Reason, p. 592.

"The term consciousness denotes a state, apperception an act of the ego; and from this alone the superiority of the latter is apparent."—Meiklejohu, Criticism of Pure Reason, note, p.

81.

"Cousin maintains that the soul possesses a mode of spontaneous thought, into which volition and reflection, and therefore personality, do not enter, and which gives her an intuition of the absolute. For this he has appropriated the name apperception, explaining it also as a true inspiration, and holding therefore, that inspirations come to man, not by the special volitions of God, as commonly believed, but fall to

## APPERCEPTION-

reason in its own right, thus constituting a scientific organ of discovery."—MacVicar, Enquiry into Human Nature, 8vo, Edin., 1853, p. 216. See Taylor's Elements of Thought;

Stewart's Philosophical Essays, essay i. ch. 1.

APPETITE.—[Physical craving. Appetites are classified under Desires.—Ed.]—"The word appetitus, from which that of appetite is derived, is applied by the Romans and the Latinists to desires in general, whether they primarily relate to the body or not, and with obvious propriety; for the primitive signification is the seeking after whatever may conduce either to gratification or happiness. Thus Cicero observes, 'Motus animorum duplices sunt; alteri, cogitationis; alteri, appetitus. Cogitatio in vero exquirendo maxime versatur: appetitus impellit ad agendum.' By two powers of action being thus placed in contrast with each other, and the one applied to thought simply, it is obvious that the other comprehends every species of desire, whether of a mental or corporeal nature. Metaphysicians also, who have written in the Latin language, use the word appetitus in the same latitude."-Cogan, On the Passions, vol. i. p. 15.

"Often means hunger, and sometimes figuratively any

strong desire."—Beattie, Mor. Science, part i. c. 1.

As our perceptions are external, which are common to us with the brutes; and internal, which are proper to us as rational beings—so appetite is sensitive and rational. The sensitive appetite was distinguished into the irascible and the concupiscible.—Reid, Act. Pow., essay iii.; Stewart, Act. Pow., vol. i. p. 14.

Appetite and Instinct.—"Appetites have been called instinctive, because they seek their own gratification without the aid of reason, and often in spite of it. They are common to man with the brute; but they differ at least in one important respect from those instincts of the lower animals which are usually contrasted with human reason. The objects towards which they are directed are prized for their own sake; they are sought as ends, while instinct teaches brutes to do many things which are needed only as means for the attainment of some ulterior purpose. Thus instinct enables a spider to entrap his prey, while appetite only leads him to devour it when in his possession."—Bowen, Lowell Lect., 228.

APPREHENSION (apprehendo, to lay hold of).—[Simple cognition,—knowledge of fact, simple or complex.—Ed.] "By simple apprehension, we mean the power which the mind possesses of forming concepts.—Morell, Mental Philos., p. 232.

Apprehension in Logic, is that act or condition of the mind in which it receives a notion of any object; and which is analogous to the perception of the senses. Incomplex apprehension regards one object, or several, without any relation being perceived between them, as a man, a card, &c. Complex apprehension regards several objects with such a relation, as a man on horseback, a pack of cards, &c.—Whately, Log., bk. ii. ch. 1, sec. 1.

"Apprehension [Die Apprehension.—Ed.] is the Kantian word for perception, in the largest sense in which we employ that term. It is the genus which includes under it, as species, perception proper and sensation proper."—Meiklejohn, Criti-

cism of Pure Reason, note, p. 127.

Apprehend and Comprehend.—"We apprehend many truths which we do not comprehend. The great mysteries of our faith, the doctrine, for instance, of the Holy Trinity—we lay hold upon it (ad prehendo), we hang upon it, our souls live by it; but we do not take it all in, we do not comprehend it; for it is a necessary attribute of God that He is incomprehensible; if He were not so He would not be God, or the being that comprehended Him would be God also. But it also belongs to the idea of God that He may be 'apprehended,' though not 'comprehended' by His reasonable creatures; He has made them to know Him, though not to know Him all, to 'apprehend' though not to 'comprehend' 'Him.'—Trench, On 'Study of Words, p. 110, 12mo, Lond., 1851; Farrar, Bampt. Lect., 521.

APPROBATION (Moral) includes a judgment of an action as right, and a feeling favourable to the agent. The judgment precedes and the feeling follows. But in some cases the feeling predominates; and in others the judgment is more prominent. [Applies properly to the moral agent, whether self or another. It is a judgment of commendation on account of well-doing.—Ed].—See Fleming's Manual of Mor. Phil., p. 102; Reid, Act. Pow., essay v. ch. 7.

A PRIORI, and A POSTERIORI.—[Commonly, reasoning from a

### A PRIORI-

general principle, held to be self-evident, to its application; and reasoning from observed facts to a general principle. Sometimes from cause to effect, and from effect to cause. According to Kant, the first applies to forms of knowledge which are not ingathered, but are prior in logical order to experience; the second, to knowledge consequent upon experience.—Ed.] "There are two general ways of reasoning, termed arguments à priori and à posteriori, or according to what is usually styled the synthetic and analytic method; the one lays down some previous, self-evident principles; and in the next place, descends to the several consequences that may be deduced from them; the other begins with a view of the phenomena themselves, traces them to their original, and by developing the properties of these phenomena, arrives at the knowledge of the cause."—King, Essay on Evil, Pref., p. 9.

"Of demonstrations there are two sorts; demonstrations à priori, when we argue from the cause to the effect; and à posteriori, when we argue from the effect to the cause. Thus when we argue from the ideas we have of immensity, eternity, necessary existence, and the like, that such perfections can reside but in one being, and thence conclude that there can be but one supreme God, who is the cause and author of all things, and that therefore it is contradictory to this to suppose that there can be two necessary independent principles, the one the cause of all the good, and the other the cause of all the evil that is in the world; this is an argument à priori. Again, when the Manicheans and Paulicians, from what they observe in things and facts, from the many natural evils which they see in the world, and the many moral wickednesses which are committed by men, conclude that there must be two different causes or principles from whence each of these proceed; this is arguing à posteriori."—Dr John Clark, Enquiry into Evil, pp. 31-2.

"The term à priori, by the influence of Kant and his school, is now very generally employed to characterize those elements of knowledge which are not obtained à posteriori—are not evolved out of factitious generalizations; but which as native to, are potentially in, the mind antecedent to the act of experience, on occasion of which (as constituting its

### A PRIORI—

subjective condition) they are first actually elicited into consciousness. Previously to Kant the terms à priori and à posteriori were, in a sense which descended from Aristotle, properly and usually employed—the former to denote a reasoning from cause to effect—the latter a reasoning from effect to cause. The term à priori came, however, in modern times, to be extended to any abstract reasoning from a given notion to the conditions which such a notion involved; hence, for example, the title à priori bestowed on the ontological and cosmological arguments for the existence of the Deity. The latter of these, in fact, starts from experience—from the observed contingency of the world, in order to construct the supposed notion on which it founds. Clarke's cosmological demonstration called à priori, is therefore, so far, properly an argument à posteriori."-Sir W. Hamilton, Reid's Works, p. 762.

"By knowledge à priori," says Kant (Criticism of Pure Reason, Introd. sec. 1), "we shall in the sequel inderstand, not such as is independent of this or that kind of experience, but such as is absolutely so of all experience. Opposed to this is empirical knowledge, or that which is possible only à posteriori, that is, through experience. Knowledge à priori is either pure or impure. Pure knowledge à priori is that with which no empirical element is mixed up. For example, the proposition, 'Every change has a cause,' is a proposition à priori, but impure because change is a conception which can

only be derived from experience."

"We have ordinarily more consideration for the demonstration called propter quid or à priori, than for that which we call quia or à posteriori; because the former proceeds from universals to particulars, from causes to effects, while the latter proceeds in a manner wholly contrary. We must nevertheless see whether we have a right to do this; since no demonstration à priori can have credence, or be received, without supposing the demonstration à posteriori, by which it must be proved. For how is it, for example, that having to prove that man feels, from this proposition, every animal feels—how, I say, will you establish the truth of this position. should some one hesitate to grant it, except by making induction of the individual animals, of whom there is not one that

### A PRIORI-

does not feel?"-Bernier, Abridgment of Gassendi "De l'En-

tendement," vol. vi. pp. 340-41.

"If there are any truths which the mind possesses, whether consciously or unconsciously, before and independent of experience, they may be called à priori truths, as belonging to it prior to all that it acquires from the world around. On the other hand, truths which are acquired by observation and experience, are called à posteriori truths, because they come to the mind after it has become acquainted with external facts. How far à priori truths or ideas are possible, is the great campus philosophorum, the great controverted question of mental philosophy."—Thomson, Outline of Laws of Thought, 2d ed. pp. 68, 69.—V. Demonstration.

ARBOR PORPHYRIANA.—In the third century Porphyry wrote Είσαγωγή, or an Introduction to Logic. He represented the five predicables under the form of a tree with its trunk and branches, and hence the name. By the Greek logicians it was called the ladder (κλίμαξ) of Porphyry. A delineation of the Arbor Porphyriana is given by Aquinas, Opusc. xlviii. tract.

ii. cap. 3.

which presides over the growth and continuation of living beings. He called it body; but an astral body, that is, an emanation from the substance of the stars, which defends us against the external agents of destruction till the inevitable term of life arrives. The hypothesis was extended by Van Helmont to the active principle which presides not only over every body, but over every particle of organized body, to which it gives its proper form.

The word is used by More (Antidote to Atheism, part i. ch.

11), as synonymous with form.

ARCHELOGY (λόγος περὶ τῶν ἀρχῶν) treats of principles, and should not be confounded with Archæology (λόγος περὶ τῶν ἀρχαίων), which treats of antiquities or things old.—See Alstedius (J. H.), Scientiarum Omnium Encyclopædia; Gideon Harvey, Archelogia Philosophica Nova, Lond. 1663.—V. PRINCIPLE.

ARCHETYPE (ἀρχή, first or chief; and τύπος, form), a model or first form.—"There were other objects of the mind, universal, eternal, immutable, which they called intelligible ideas, all

# ARCHETYPE-

originally contained in one archetypal mind or understanding, and from thence participated by inferior minds or souls."—Cudworth, Intell. Syst., p. 387.

"The first mind is, according to this hypothesis, an archetypal world which contains intelligibly all that is contained sensibly in our world."—Bolingbroke, essay iv. sec. 28.

Cornelius Agrippa gave the name of Archetype to God, considered as the absolute model of all being.

In the philosophy of Locke, the archetypes of our ideas are the things really existing out of us. "By real ideas, I mean such as have a foundation in nature; such as have a conformity with the real being and existence of things, or with their archetypes."—Essay on Hum. Understand., bk. ii. ch. 30.

"There is truth as well as poetry in the Platonic idea of things being formed after original archetypes. But we hold that these archetypes are not uncreated, as Plato seems to suppose; we maintain that they have no necessary or independent existence, but that they are the product of Divine wisdom; and that we can discover a final cause for their prevalence, not, indeed, in the mere convenience and comfort of the animal, but in the aid furnished to those created intelligences who are expected to contemplate and admire their predetermined forms."—M'Cosh, Meth. of Div. Govern., bk. ii. ch. 1, sec. 4.

"Apelles paints a head of Jupiter. The statue of Phidias was his archetype, if he paints after it from memory, from idea. It was his model, if he paints after it in presence of the statue. He paints a likeness, if the resemblance is striking. If he makes a second painting in imitation of the first, he takes a copy."—Taylor, Synonyms.

ARCHITECTONICK.—"I understand by an Architectonick the art of systems. As the systematic unity is what first of all forms the usual cognition into science, that is, from a mere aggregate of it forms a system, so is Architectonick the doctrine of the Scientific in our cognition in general, and belongs therefore necessarily to the doctrine of Method."—Kant, Critick of Pure Reason, by Haywood, p. 624.

**ARGUMENT** (argue, from  $\alpha_{eyo}$ ; clear, manifest—to show, reason, or prove), is an explanation of that which is doubtful by that which is known.

### ARGUMENT-

Reasoning (or discourse) expressed in words, is Argument. Every argument consists of two parts: that which is proved; and that by means of which it is proved. The former is called, before it is proved, the question; when proved the conclusion (or inference); that which is used to prove it, if stated last (as is often done in common discourse), is called the reason, and is introduced by "because," or some other causal conjunction, e.g., "Cæsar deserved death, because he was a tyrant, and all tyrants deserve death." If the conclusion be stated last (which is the strict logical form, to which all reasoning may be reduced), then, that which is employed to prove it is called the premises, and the conclusion is then introduced by some illative conjunction, as therefore, e.g.,

"All tyrants deserve death: Cæsar was a tyrant;

Therefore he deserved death."—

Whately, Log., bk. ii. ch. 3, sec. 2.

The term argument in ordinary discourse has several meanings:—1. It is used for the premises in contradistinction to the conclusion, e.g., "the conclusion which this argument is intended to establish is," &c. 2. It denotes what is a course or series of arguments, as when it is applied to an entire dissertation. 3. Sometimes a disputation or two trains of argument opposed to each other. 4. Lastly, the various forms of stating an argument are sometimes spoken of as different kinds of argument, as if the same argument were not capable of being stated in various ways.—Whately, Log., App. i.

"In technical propriety argument cannot be used for argumentation, as Dr Whately thinks, but exclusively for its middle term. In this meaning, the word (though not with uniform consistency) was employed by Cicero, Quintilian, Boethius, &c.; it was thus subsequently used by the Latin Aristotelians, from whom it passed even to the Ramists; and this is the meaning which the expression always first, and most naturally, suggests to a logician."—Sir W. Hamilton,

Discussions, p. 147.

In this sense the discovery of arguments means the discovery of middle terms.

Argument (The Indirect).—It is opposed to the Ostensive or

# ARGUMENT—

Direct. Of *Indirect arguments* several kinds are enumerated by logicians.

Argumentum ad hominem, an appeal to the principles of an opponent.

Argumentum ex concesso, a proof derived from some truth already admitted.

Argumentum a fortiori, the proof of a conclusion deduced from that of a less probable supposition that depends upon it.— Matthew vi. 30, vii. 11.

Argumentum ad judicium, an appeal to the common sense of mankind.

Argumentum ad verecundiam, an appeal to our reverence for some respected anthority.

Argumentum ad populum, an appeal to the passions and prejudices of the multitude.

Argumentum ad ignorantiam, an argument founded on the ignorance of an adversary.

Argumentum per impossibile, or Reductio ad absurdum is the proof of a conclusion derived from the absurdity of a contrary supposition. These arguments are called Indirect, because the conclusion that is established is not the absolute and general one in question, but some other relative and particular conclusion, which the person is bound to admit in order to maintain his consistency. The Reductio ad absurdum is the form of argument which more particularly comes under this denomination. In geometry this mode of reasoning is much employed, by which, instead of demonstrating what is asserted, everything which contradicts that assertion is shown to be absurd. For, if everything which contradicts a proposition is absurd, or unthinkable, the proposition itself must be accepted as true. In other sciences, however, which do not depend upon definition, nor proceed by demonstration, the supposable and the false find a place between what is true and what is absurd.

ARGUMENTATION is opposed to intuition and consciousness. It is used by Dr Price as synonymous with deduction (*Review*, ch. 5).

Argumentation or reasoning is that operation of mind whereby we infer one proposition from two or more propositions premised.—Watts, Log., Introd.

# ARGUMENTATION-

Argumentation must not be confounded with reasoning. Reasoning may be natural or artificial; argumentation is always artificial. An advocate reasons and argues; a Hottentot reasons, but does not argue. Reasoning is occupied with ideas and their relations, legitimate or illegitimate; argumentation has to do with forms and their regularity or irregularity. One reasons often with one's self; you cannot argue but with two. A' thesis is set down—you attack, I defend it; you insist, I reply; you deny, I approve; you distinguish, I destroy your distinction; your objections and my replies balance or overturn one another. Such is argumentation. It supposes that there are two sides, and that both agree to the same rules.—Diet. des Seiences Philosoph.

"Argumentationis nomine tota disputatio ipsa comprehenditur, constans ex argumento et argumenti confutatione."—Cicero.

ART (Latin ars, from Greek ἀρετή, strength or skill; or from ἄρω to fit, join, or make agree).—[Skill in practice. More specially skill in giving embodiment or representation to the ideal.—Ed.]

Ars est ratio reeta aliquorum operum faciendorum.—Thomas Aquinas.

Ars est habitus eum reeta ratione effectivus; quia per precepta sua dirigit effectionem seu productionem operis externi sensibilis. Differt autem a natura, quod natura operatur in eo in quo est; ars vero nunquam operatur in eo in quo est; nisi per accidens, puta eum medieus scipsum sanat.—Derodon, Phys., p. 21.

Ars est methodus aliquid juxta regulas determinatas operandi.—Bouvier.

Ars est recturatio factibilium, atque in eo differt a prudentia, qua est reeta ratio agibilium.—Peeman's, Introd. ad Philosoph., p. 31.

Doeti rationem artis intelligunt, indocti voluptatem.—Quint. This is the difference, in the fine arts especially, between acquired knowledge and natural taste.

"We speak of art as distinguished from nature; but art itself is natural to man. . . . If we admit that man is susceptible of improvement, and has in himself a principle of progression and a desire of perfection, it appears improper to say that he has quitted the state of his nature, when he has begun to proceed; or that he finds a station for which he

ART—

was not intended, while, like other animals, he only follows the disposition and employs the powers that *nature* has given. The latest efforts of human invention are but a continuation of certain devices which were practised in the earliest ages of the world, and in the rudest state of mankind."—Ferguson, Essay on Hist. of Civ. Soc., pp. 10–13.

Art is defined by Lord Bacon to be "a proper disposal of the things of nature by human thought and experience, so as to make them answer the designs and uses of mankind." It may be defined more concisely to be the adjustment of means to accomplish a desired end.—Stewart, Works, vol ii. p. 36, last edition.

"Art has in general preceded science. There were bleaching and dyeing, and tanning, and artificers in copper and iron, before there was chemistry to explain the processes used. Men made wine before there was any theory of fermentation; and glass and porcelain were manufactured before the nature of alkalies and earths had been determined.

The pyramids of Nubia and Egypt, the palaces and sculptured slabs of Nineveh, the Cyclopean walls of Italy and Greece, the obelisks and temples of India, the cromlechs and druidical circles of countries formerly Celtic, all preceded the sciences of mechanics and architecture. There was music before there was a science of acoustics; and painting while as yet there was no theory of colours and perspective."—M'Cosh, On Div. Govern., p. 151.

On the other hand, Cicero has said (De Oratore, i. 41), "Nihil est enim, quod ad artem redigi possit, nisi ille prins qui illa tenet, quorum artem instituere vult, habeat illam scientiam, ut ex iis rebus, quarum ars nondum sit, artem efficere possit."

And Mr Harris (*Phil. Arrangements*, ch. 15) has argued —"If there were no theorems of science to guide the operations of *art*, there would be no *art*; but if there were no operations of *art*, there might still be theorems of science. Therefore science is prior to *art*."

"The principles which art involves, science evolves. The truths on which art depends lurk in the artist's mind nndeveloped, guiding his hand, stimulating his invention, balancing his judgment. but not appearing in the form of

## ART-

enunciated propositions. Art in its earlier stages is anterior to science—it may afterwards borrow aid from it."—Whewell, Phil. of Induct. Sciences, vol. ii. pp. 111, 112, new ed.

If the knowledge used be merely accumulated experience, the art is called *empirical*; but if it be experience reasoned upon and brought under general principles, it assumes a higher character and becomes a scientific art.

The difference between art and seicnce is regarded as merely verbal by Sir William Hamilton in Edin. Rev., No.

115.

On the other side, see Preface of St Hilaire's translation of the Organon, p. 12; Whewell, Phil. of Induct. Sciences, part ii. bk. ii. ch. 8.

"The distinction between science and art is, that a science is a body of principles and deductions, to explain the nature of some object matter. An art is a body of precepts with practical skill for the completion of some work. A science teaches us to know, an art to do."—Thomson, Outline of Laws of Thought, p. 16, 2d ed.

"The object of seicnce is knowledge; the objects of art are works. In art, truth is a means to an end; in science it is the only end. Hence the practical arts are not to be classed among the sciences."—Whewell, Phil. of Induct. Sciences, aph. 25.

"Science gives principles, art gives rules. Science is fixed, and its object is intellectual; art is contingent, and its object sensible."—Harris, Dialogue on Art.

ASCETICISM (&oxnois, exercise).—[The practice of self-denial, beyond the requirements of moral law, avowedly for the attainment of a higher moral life.—Ed.] The exercise of severe virtue among the Pythagoreans and Stoics was so called. It consisted in chastity, poverty, watching, fasting, and retirement.

"The assetics renounced the business and the pleasures of the age; abjured the use of wine, of flesh, and of marriage, chastised the body, mortified their affections, and embraced a life of misery as the price of eternal happiness."—Gibbon, Hist., ch. 37.

This name may be applied to every system which teaches man not to govern his wants by subordinating them to reason

### ASCETICISM-

and the law of duty, but to stifle them entirely, or at least to resist them as much as he can; and these are not only the wants of the body, but still more those of the heart, the imagination, and the mind; for society, the family, most of the sciences and arts of civilization are proscribed sometimes as rigorously as physical pleasures. The care of the soul and the contemplation of the Deity are the only employments. Asceticism may be distinguished as religious, which is founded on the doctrine of expiation, and seeks to appease the divine wrath by voluntary sufferings, and philosophical, which aims at accomplishing the destiny of the soul, developing its faculties, and freeing it from the servitude of sense.—

Dict. des Sciences Phil.

The principle of asceticism is described by Bentham (Introd. to Prin. of Mor. and Legislation, ch. 2), as "that principle which approves of actions in proportion as they tend to diminish human happiness, and conversely disapproves of them as they tend to augment it." But this is not a fair representation of asceticism in any of its forms.

ASSENT (ad sentio—to think the same—to be of the same mind or opinion).—"Subscription to articles of religion, though no more than a declaration of the subscriber's assent, may properly enough be considered in connection with the subject of oaths, because it is governed by the same rule of interpretation."—Paley, Mor. Phil., bk. iii, ch. 22.

Assent is that act of the mind by which we accept as true a proposition, a perception, or an idea. It is a necessary part of judgment; for if you take away from judgment affirmation or denial, nothing remains but a simple conception without logical value, or a proposition which must be examined before it can be admitted. It is also implied in perception, which would otherwise be a mere phenomenon which the mind had not accepted as true. . . The Stoics, while they admitted that most of our ideas came from without, thought that images purely sensible could not be converted into real cognitions without a spontaneous act of the mind, which is just assent or belief, our atabeous.—Dict. des Sciences Philosoph.—V. Bellef, Consent.

ASSERTION (ad sero, to join to, to declare), in Logic, the affirmation or denial of something.—Whately, Log., bk. ii. ch. 2, sec. 1.

ASSERTORY.—[Affirmative] of "the kinds of oaths divided by the schoolmen;" there was "one assertory, the other promissory, to which some add a third, comminatory."—Fuller, Worthies, Cornwall.

Judgments have also been distinguished into problematic, assertory, and apodeictic.—V. Judgment, Oath.

ASSOCIATION (associo, to accompany).—[Applied to laws of mental combination which facilitate recollection. The philosophy which traces all knowledge to experience regards association as also a means of developing higher powers.—Ed.] "Ideas that in themselves are not all of kin, come to be so united in some men's minds that it is very hard to separate them; they always keep company, and the one no sooner at any time comes into the understanding but its associate appears with it."—Locke, essay, bk. ii. ch. 33, sec. 5.

"If several thoughts, or ideas, or feelings, have been in the mind at the same time, afterwards, if one of these thoughts return to the mind, some, or all of the others, will frequently return with it; this is called the association of ideas."—Taylor,

Elements of Thought.

"By the law of continuity, the mind, when the chord has once been struck, continues, as Hume describes it, to repeat of itself the same note again and again, till it finally dies away. By association it falls naturally into the same train of consecutive ideas to which it has been before accustomed. Imagine a glass so constructed that when the face placed before it was withdrawn, the image should still continue reflected on it for a certain time, becoming fainter and fainter until it finally disappeared. This would represent the law of continuity. Imagine that when a book and a man had been once placed before it together, it should be able, when the book was next brought alone, to recall the image of the man also. This would be the law of association. On these two laws depends the spontaneous activity of the mind."\*—
Sewell, Christ. Mor., ch. 14.

"The law of association is this,—That empirical ideas which often follow each other, create a habit in the mind, whenever the one is produced, for the other always to follow."—Kant, Anthropology, p. 182.

<sup>\*</sup> See the use which Butler has made of these in his Analogy, ch. 1 and ch. 5.

## ASSOCIATION—

"The effect of custom in connecting together different thoughts in such a manner that the one seems spontaneously to follow the other."—Stewart's Outl. of Mor. Phil., part i. sec. 53.

"Intelligitur per associationem idearum non quavis naturalis et necessaria earundem conjunctio, sed quæ fortuita est, aut per consuetudinem vel affectum producitur, qua idea, qua nullum naturalem inter se habent nexum, ita copulantur, ut recurrente una, tota earum catena se conspiciendam intellectui præbeat."-

Bruckerus, De Ideis.

Locke, Essay, bk. ii. ch. 23; Hume, Essays, essay iii.; Hartley, Obscrv. on Man; Reid, Intell. Pow., essay iv.; Stewart, Elements, vol. ii. ch. 5; Brown, Lectures, lect. xxxiii. [Hamilton's Reid, notes D\*\* and D\*\*\* p. 889; Hamilton's Lects. on Metaph., ii. p. 223; J. S. Mill's Exam. of Hamilton's Philos., 3d ed. p. 219 (specially on "Insolubility," the "Revivability," and the "Associability" of Feelings); Herbert Spencer, Principles of Psychology, i. 228; Bain's Senses and

Intellect, 2d ed. 327.—Ed.]

"The influence of association upon morals opens an ample field of inquiry. It is from this principle that we explain the reformation from theft and drunkenness in servants which we sometimes see produced by a draught of spirits in which tartar emetic had been secretly dissolved. The recollection of the pain and sickness excited by the emetic, naturally associates itself with the spirits, so as to render them both equally the objects of aversion. It is by calling in this principle only that we can account for the conduct of Moses in grinding the golden calf into a powder, and afterwards dissolving it (probably by means of hepar sulphuris) in water, and compelling the children of Israel to drink of it as a punishment for their idolatry."-Dr Rush, Medical Inquiries, vol. ii. 8vo, Philadelphia, 1793, p. 42.—V. Combination.

ASSUMPTION (assumo, to take for granted).—"The unities of time and place arise evidently from false assumptions."-

Johnson, Proposals for, &c., Shakspeare.

Of enunciations or premises, that which is taken universally . is called the proposition, that which is less universal and comes into the mind secondarily is called the assumption. -Trendelenburg, Notæ in Arist.

### ASSUMPTION -

The Assumption is the minor or second proposition in a categorical syllogism. The major is sometimes called the Presumption.

ATHEISM (α, priv.; and Θεός, God).—The doctrine that there is no God. [The term is properly applied to every system of the universe which does not postulate an Intelligent First Cause.—Ed.]

The name Atheist is said to have been first applied to Diagoras of Melos (or Delos), a follower of Democritus, who explained all things by motion and matter, or the movement of material atoms. The other form of atheism in ancient times was that of Thales, Anaximenes, and Heraclitus, who accounted for all things by the different transformations of the one element of water. Straton of Lampsacus rejected the purely mechanical system of Democritus, and ascribed to matter a power of organization which gave to all beings their forms and faculties. Epicurus was the contemporary of Straton, but the follower of Democritus, on whose system he grafted the morality which is suited to it. The materialism of Hobbes and others in modern times has, in like manner, led to atheism. See Cudworth's Intellectual System, p. 111; Farrar's Bampton Lect., p. 586.

It is a fine observation of Plato in his Laws—that atheism is a disease of the soul before it becomes an error of the

understanding.

Leclerc, Hist. des Systemes des Anciens Athées. In Biblio-

theque Choisie.

"To believe nothing of a designing principle or mind, nor any cause, measure, or rule of things but chance, so that in nature neither the interest of the whole, nor of any particulars, can be said to be in the least designed, pursued, or aimed at, is to be a perfect atheist."—Shaftesbury, Inquiry Concerning Virtue, bk. i. part i. sec. 2.

Hi soli sunt athei, qui mundum rectoris sapientis consilio negant in initio constitutum fuisse atque in omni tempore administrari.—Hutcheson, Metaphys., pars 3, cap. 1.

Puntheists are often confounded with Atheists, such as Xenophanes among the ancients, or Spinoza and Schelling among the moderns, who, instead of denying God, absorb everything into Him.

## ATHEISM-

Atheism has been distinguished from Anti-theism; and the former has been supposed to imply merely the non-recognition of God, while the latter asserts His non-existence. This distinction is founded on the difference between unbelief and disbelief (Chalmers, Nat. Theol., i. 58), and its validity is admitted in so far as it discriminates merely between sceptical and dogmatic atheism.—Buchanan, Faith in God, vol. i. p. 396.

"The verdict of the atheist on the doctrine of a God, is only that it is not proven. It is not that it is disproven. He is but an atheist. He is not an anti-theist."—(Chalmers, ut supra.)

ATHEIST.—By the theological writers of the 16th century it is applied to the unbelief of such persons as Pomponatius; and in the 17th it is used by Bacon (Essay on Atheism), Milton (Par. Lost, bk. vi.) and Bunyan (Pilgrim) to imply general unbelief. Toward the end of the same century it is found e.g., in Kortholt, De Tribus Imputoribus (1680), to include Deism such as that of Hobbes, as well as blank Pantheism like Spinoza's-Tillotson (Serm. on Atheism); and Bentley (Boyle Lect.) use the word more exactly; and the invention of the term Deism induced in the writers of the 18th century a more limited and exact use of the former term. But in Germany, Reimaunus (Hist. Univ. Atheismi, 1725), and Buddeus (De Atheismi et Superstitione, 1723), use it most widely, and make it include disbelief of immortality. Walch (Bibl. Theol. Selecta, 1757) uses it to include the Pantheism of Spinoza,

The term was subsequently applied to the French writers, such as D'Holbach, who did not see the necessity of believing in a personal First Cause. It is now applied to such writers as Comte, whe refuse to entertain the question of a Deity as not discernible by science.—Farrar, Bampton Leet., p. 586.

ATOM, ATOMISM (α, priv.; and τέμνω, to cut, that which cannot be cut or divided is an atom).—[Atoms are the ultimate particles of matter. The atomic theory is that which accounts for existence by the action, interaction, combinations of atoms.—Ed.]

"Now, I say, as Ecphantus and Archelaus asserted the

## ATOM, ATOMISM-

corporeal world to be made of atoms, yet notwithstanding, held an incorporeal deity, distinct from the same as the first principle of activity in it, so in like manner did all other ancient atomists generally before Democritus join theology and incorporealism with their atomical physiology."—Cudworth, Intell. Syst., p. 26.

Leucippus considered the basis of all bodies to consist of extremely fine particles, differing in form and nature, which he supposed to be dispersed throughout space, and to which the followers of Epicurus first gave the name of atoms. To these atoms he attributed a rectilinear motion, in consequence of which, such as are homogeneous united, whilst the

lighter were dispersed throughout space.

The doctrine of atomism did not take its rise in Greece, but in the East. It is found in the Indian philosophy. Kanada, the author of the system, admitted an infinite intelligence distinct from the world. But he could not believe matter to be infinitely divisible, as in this case a grain of sand would be equal to a mountain, both being infinite. Matter consists, then, of ultimate indivisible atoms, which are indestructible and eternal. Empedocles and Anaxagoras did not exclude mind or spirit from the universe. Leucippus and Democritus did. Epicurus added nothing to their doctrine. Lucretius gave to it the graces of poetry.

In all its forms, explaining the universe by chance or necessity, it tends to materialism or atheism, although Gassendi has attempted to reconcile it with a belief in God.—Stewart, Act. Pow., vol. ii. last ed. 369.—V. Molecule.

ATTENTION (attendo, to stretch towards).—[Concentrated observation.—Ed.]

"When we see, hear, or think of anything, and feel a desire to know more of it, we keep the mind fixed upon the object; this effort of the mind, produced by the desire of knowledge, is called attention."—Taylor, Elements of Thought.

Attention is the voluntary directing of the energy of the mind towards an object or an act. It has been said by Sir H. Holland (Mental Physiol., p. 14), that "The phrase of direction of consciousness might often be advantageously sub-

### ATTENTION-

stituted for it." It implies Will as distinct from Intelligence and Sensibility. It is the voluntary direction of the intelligence and activity. Condillac confounded it with a sensation of which we were passively conscious, all other sensations being as if they were not. Laromiguiere regarded it as a faculty, and as the primary faculty of the understanding, which gives birth to all the rest. But we may do an act with attention as well as contemplate an object with attention. And we may attend to a feeling as well as to a cognition. According to De Tracy (Ideologie, ch. 11), it is a state of mind rather than a faculty. It is to be acquired and improved by habit. We may learn to be attentive as we learn to walk and to write.

According to Dr. Reid, "Attention is a voluntary act; it requires an active exertion to begin and to continue it; and it may be continued as long as we will; but consciousness is involuntary, and of no continuance, changing with every thought."—Intell. Pow., essay i. ch. 5. According to Reid, Attention to external things is observation. Attention to the subjects of our own consciousness is reflection.

Attention and abstraction are the same process, it has been said, viewed in different relations. They are the positive and negative poles of the same act. The one evolves the other. Attention is the abstraction of the mind from all things else, and fixing it upon one object; and abstraction is the fixing the mind upon one object to the exclusion of others.

ATTRIBUTE (attribuo, to apportion, to ascribe), is anything that can be predicated of another.

"Heaven delights

To pardon erring man; sweet mercy seems
Its darling attribute, which limits justice."

Dryden, All for Love,

"Attributes are usually distributed under the three heads of quality, quantity, and relation."—Mill, Log., 2d ed. vol. i. p. 83.

In the Schools, the definition, the genus, the proprium, and the accident, were called dialectic attributes; because, according to Aristotle (*Topic*, lib. i. cap. 6), these were the four points of view in which any subject of philosophical discussion should be viewed.

### ATTRIBUTE—

"A predicate, the exact limits of which are not determined, cannot be used to define and determine a subject. It may be called an attribute, and conveys not the whole nature of the subject, but some one quality belonging to it. 'Metals are heavy,' 'some snakes are venomous,' are judgments in which this kind of predicable occurs."—Thomson, Outline of Laws

of Thought, 2d ed. p. 161.

Attributes (real or metaphysical) are always real qualities, essential and inherent, not only in the nature, but even in the substance of things. "By this word attribute," said Descartes (in his letter to Regius), "is meant something which is immovable and inseparable from the essence of its subject, as that which constitutes it, and which is thus opposed to mode." Thus unity, identity, and activity, are attributes of the soul; for I cannot deny them, without, at the same time, denying the existence of the soul itself. Sensibility, liberty, and intelligence, are but faculties. In God there is nothing but attributes, because in God everything is absolute, involved in the substance and unity of the necessary being. In Deo non proprie modos aut qualitates, sed attributa tantum dicimus esse.—Descartes, Princip. Philosoph., i. n. 57.

In man the essential mark is reason—attribute, capacity of learning—mode, actual learning—quality, relatively to another more or less learned.—Peemans, Introd. ad Philosoph.,

p. 6.—V. QUALITY, MODE.

AUTHENTIC [aidertinis, trustworthy, reliable.]—"A genuine book is that which was written by the person whose name it bears, as the author of it. An authentic book is that which relates matters of fact as they really happened. A book may be genuine without being authentic; and a book may be authentic without being genuine. The books written by Richardson and Fielding are genuine books, though the histories of Clarissa and Tom Jones are fables. . . . Anson's voyage may be considered as an authentic book, it probably containing a true narrative of the principal events recorded in it; but it is not a genuine book, having not been written by Walters, to whom it is ascribed, but by Robins."—Bp. Watson, Apology for the Bible, p. 33.

In jurisprudence, those laws or acts are called *authentic* which are promulgated by the proper public officer.

AUTHORITY (The Principle of).—"The principle of adopting the belief of others, on a matter of opinion, without reference to the particular grounds on which the belief may rest."—Sir G. C. Lewis, On Authority in Matters of Opinion, p. 6.—V. CONSENT.

Authority (The Argument from).—It is an argument for the truth of an opinion that it has been embraced by all men, in all ages, and in all nations. Quod semper, ubique, et ab omnibus, are the marks of universality, according to Vincentius Lirinensis. "This word is sometimes employed in its primary sense, when we refer to any one's example, testimony, or judgment; as when, e.g., as we speak of correcting a reading in some book on the authority of an ancient MS., or giving a statement of some fact on the authority of such and such historians, &c. In this sense the word answers pretty nearly to the Latin auctoritas. It is a claim to deference.

"Sometimes, again, it is employed as equivalent to potestas, power, as when we speak of the authority of a magistrate. This is a claim to obedience."—Whately, Log., App. 1.

Una in re consentio omnium gentium lex natura putanda

est.—Cicero, i. Tuscul.

Multum dare solemus præsumptioni omnium hominum: Apud nos veritatis argumentum est, aliquid omnibus videri.

-Seneca, Epist. cxvii.

AUTOCRASY (αὐτός, self; and κρατέω, to have power).—[Underived power. Absolute power within the being itself.— Ed.] "The Divine will is absolute, it is its own reason, it is both the producer and the ground of all its acts. It moves not by the external impulse or inclination of objects, but determines itself by an absolute autocrasy."—South, vol. vii. ser. x.

"God extends his dominion even to man's will, that great seat of freedom, that with a kind of autocrasy and supremacy within itself, commands its own actions, laughs at all compulsion, scorns restraint, and defies the bondage of human laws or external obligations."—South, vol. i. ser. vii.—1. Autonomy.

**AUTOMATON** (αὐτόματον, that which moves of itself.)—[A selfacting machine.]

Automatic.-" The difference between an animal and an

### AUTOMATIC--

automatic statue consists in this, that in the animal we trace the mechanism to a certain point, and then we are stopped, either the mechanism becoming too subtile for our discernment, or something else beside the known laws of mechanism taking place; whereas, in the automaton, for the comparatively few motions of which it is capable, we trace the mechanism throughout."—Paley, Nat. Theol., ch. 3.

Automatic motions are those muscular actions which are not dependent on the mind, and which are either persistent, or take place periodically with a regular rhythm, and are dependent on normal causes seated in the nerves or central organs of the nervous system. "Movements influenced simply by sensation, and not at all by the will, are auto-

matic, such as winking."—Morell, Psychology, p. 99.

Leibnitz, tom. i. p. 156, has said, "anima humana est spirituale quoddam automaton." In a note on this passage, Bilfinger is quoted as saying that automaton is derived from αὐτός and μάω or ματέω, to seek or desire. The soul is a being desiring of itself, whose changes are desired by itself; whereas the common interpretation of the word is self-moving.

"By the compound word αὐτόματον (ὅταν αὐτὸ μάτην γένηται) Aristotle expresses nature effecting either more or less than the specific ends or purposes to which her respective operations invariably tend."—Nat. Auseult., lib. ii. cap. 6; Gillies, Analysis of Aristotle's Works, ch. 2, note. Nature operating κατὰ συμβεβηκός, and producing effects not in her intention, is called αὐτόματον or chance, and art operating κατὰ συμβεβηκός, and producing effects not in her intention, is called τύχη, fortune. Thus, chance or fortune cannot have any existence independently of intention or design.

Automatism is one of the theories as to the activity of matter. See Stewart, Act. Pow., vol. ii. pp. 378, 379.

AUTONOMY (αὐτός νόμος, a law itself).—[Autonomy of the will is Kant's phrase for the doctrine that the human will is a law unto itself, or carries its guiding principle within itself. This, with him, implies the essential unity, if not identity, of reason and will, the law-revealing and the law-executing powers.—Ed.] In the philosophy of Kant, autonomy is

## AUTONOMY-

ascribed to the reason in all matters of morality. The meaning is, that reason is sovereign, and the laws which it imposes on the will are universal and absolute. Man, as possessed of reason, is his own lawgiver. In this, according to Kant, consists the true character and the only possible proof of liberty. See *Groundwork of the Metaph. of Ethics*, end of ch. ii. and beginning of ch. iii.

AUTOTHEISTS (αὐτός θεός).—[Those who make themselves God.]

Autotheistæ qui nulla alia entia præter se agnoscunt.—Lacoudre,

Instit. Philosoph., tom. ii. p. 120.

AXIOM (ἀξίωμα, from ἀξιόω, to think worthy), a position of worth or authority. In science, that which is assumed as the basis of demonstration. In mathematics, a self-evident

proposition.

Diogenes Laertius (Life of Zeno, ch. 48) explains an axiom according to Chrysippus, as meaning a proposition asserting or denying something. "It has received the name of axiom, aξίωμα, because it is either maintained, aξιούται, or repudiated." "There are a sort of propositions, which, under the name of maxims and axioms, have passed for principles of science."—Locke, On Hum. Understand., book iv. ch. 7. "Philosophers give the name of axioms only to self-evident truths that are necessary, and are not limited to time and place, but must be true at all times and in all places."—Reid, Intell. Pow., essay ii. chap. 20; see also Sir William Hamilton's edition of Reid, note A, sec. 5. Mr Stewart (Elements, part ii. ch. 1) contends that axioms are elemental truths necessary in reasoning, but not truths from which anything can be deduced.

This term was first applied by mathematicians to a certain number of propositions which are self-evident, and serve as the basis of all their demonstrations. Aristotle applied it to all self-evident principles, which are the grounds of all science (Analyt. Post., lib. i. chap. 2). According to him they were all subordinate to the supreme condition of all demonstration, the principle of identity and contradiction. The Stoics, under the name of axioms, included every kind of general proposition, whether of necessary or contingent truth. In this sense the term is employed by Bacon, who, not satisfied with submitting axioms to the test of experience, has

### AXIOM-

distinguished several kinds of axioms, some more general than others (Novum Organum, lib. i. aphor. 13, 17, 19, &c.) "Bacon's way of using the word 'axioma' as if it were equivalent to 'enuntiatum' or 'propositio,' he derived from Peter Ramus. Hasse, an early commentator on Ramus, remarks that the word is used in the same way by Cicero, who probably took it from the Stoics."—Bain's Works, ed. 1857, vol. i. p. 136. The Cartesians, who wished to apply the methods of geometry to philosophy, have retained the Aristotelian use of the term. Kant has consecrated it to denote those principles which are the grounds of mathematical science, and which, according to him, are judgments absolutely independent of experience, of immediate evidence, and which have their origin in the pure intuition of time and space.

BEAUTY.—"All the objects we call beautiful agree in two things, which seem to concur in our sense of beauty. First, When they are perceived, or even imagined, they produce a certain agreeable emotion or feeling in the mind; and, secondly, This agreeable emotion is accompanied with an opinion or belief of their having some perfection or excellence belonging to them."—Reid, Intell. Pow., essay viii. ch. 4.

Beauty is absolute, real, and ideal. The absolutely beautiful belongs to Deity. The really beautiful is presented to us in the objects of nature and the actions of human life. The ideally beautiful is aimed at by art. Plato identified the beautiful with the good, τὸ καλὸν καὶ ἀγαθόν. But, although the ideas of the beautiful, of the good, and of the true are related to each other, they are distinct. There may be truth and propriety or proportion in beauty—and there is a beauty in what is good or right, and also in what is true. But still these ideas are distinct.

Dr. Hutcheson (Inquiry Concerning Beauty, &c.) distinguishes beauty into "absolute; or that beauty which we perceive in objects without comparison to anything external, of which the object is supposed an imitation or picture;

## BEAUTY-

such as that beauty, perceived from the works of nature; and comparative or relative beauty, which we perceive in objects, commonly considered as imitations or resemblances of something else." According to Hutcheson, the general foundation or occasion of the ideas of beauty is "uniformity amidst variety."—Inquiry, sec. 2.

Berkeley, in his Alciphron, and Hume, in many parts of his works, made utility the foundation of beauty. But objects which are useful are not always beautiful, and objects which are beautiful are not always useful. That which is useful is useful for some; and that which is beautiful is beautiful in itself, and independent of the pleasure which it gives, or the end it may serve.

On the question whether mental or material objects first give us feelings of beauty, see Stewart (Act. Pow., vol. i. p. 279), Smith (Theory of Mor. Sent., part iv. ch. 1), and Alison (Essay on Taste).

Dr. Price, in his Review of Principal Questions in Morals, sec. 2, has some remarks on natural beauty. See also the article "Beauty" in the Encyclop. Brit., by Lord Jeffrey; Kames, Elements of Criticism, vol. i. ch. 3; Burke On the Sublime and Beautiful; Knight's Enquiry into Principles of Taste; Sir Uvedale Price On the Pieturesque, with Preface by Sir T. D. Lauder, 8vo, Edin., 1842; Stewart's Essays, part ii.; Crousaz, Traité de Beau; André, Essai sur le Beau.—V. ÆSTHETICS, IDEAL.

BEING (τὸ ὄυτως ὄυ, that which is, existence).—[German, Seyn.]

"This (bcing), applies to everything which exists in any way whether as substance or accident, whether actually or potentially, whether in the nature of things, or only in our notions; for, even what we call entia rationis, or fictions of our minds, such as hippo-centaur, or mountain of gold, have a being; even negation or privation have an existence; nay, according to Aristotle,\* we can say that nothing has a being. In short, whenever we can use the substantive verb is, there must be some kind of being."—Monboddo, Ancient Metaphys., bk. i. ch. 4.

According to some (Dict. des Sciences Philosoph., art. "Etre"), we can have no idea of nothing; according to others

\* Metaphys., lib. iv. cap. ii.

#### BEING-

(Smart, Man. of Log., 1849, p. 130), the knowledge of contraries being one, if we know what being is, we know what not being is.

Being is either substance or accident: substance is either matter or mind: accident is divided by the other categories.

—V. Ontology.

BELIEF (that which we live by, or according to, or lief, in German belieben, from lubct, that, which pleases.)—[Fiducia, πίστις, Glaube. The recognition of the reality of an object which is neither present in consciousness nor discovered by the senses. Also, the mind's assent to the truth of a proposition.—Ed.]

"Belief, assent, conviction, are words which I do not think admit of logical definition, because the operation of mind signified by them is perfectly simple, and of its own kind. Belief must have an object. For he who believes must believe something, and that which he believes is the object of his belief. Belief is always expressed in language by a proposition wherein something is affirmed or denied. Belief admits of all degrees, from the slightest suspicion to the fullest assurances. There are many operations of mind of which it is an essential ingredient, as consciousness, perception, remembrance. We give the name of evidence to whatever is a ground of belief.—Reid's Intell. Powers, essay ii. ch. 20; Inquiry, xx. sec. 5.

"St. Austin accurately says, 'We know what rests upon reason; we believe what rests upon authority.' But reason itself must rest at last upon authority; for the original data of reason do not rest upon reason, but are necessarily accepted by reason on the authority of what is beyond itself. These data are, therefore, in rigid propriety, beliefs or trusts. Thus it is, that in the last resort, we must, perforce, philosophically admit, that belief is the primary condition of reason, and not reason the ultimate ground of belief. We are compelled to surrender the proud Intellige ut credas of Abelard, to content ourselves with the humble Crede ut intelligas of Anselm."—Sir Will. Hamilton, Reid's Works, note A, sec. 5, p. 760. Sir W. Hamilton says (Letter to Mr Calderwood in App. to Lect. II. 530—"The sphere of our belief is much more extensive than the sphere of our knowledge, and therefore when I deny

#### BELIEF—

that the Infinite can by us be known, I am far from denying that by us it is, must, and ought to be believed. In the order of nature, belief always precedes knowledge."—Sir W. Hamilton, Metaphys., i. p. 44. The meaning is that knowledge has in each particular instance faith as its basis, and all human knowledge finds its resting-place on necessary belief.—Calderwood, Phil. of Infin. 2 ed. p. 29.

See Guizot, Meditations, &c. Quel est le vrai sens du mot

Foi, p. 135, 8vo, Paris, 1852.

To believe is to admit a thing as true, on grounds sufficient, subjectively; insufficient, objectively.—Kant, Crit. de la Rais.

Prat., p. 11.

"The word believing has been variously and loosely employed. It is frequently used to denote states of consciousness which have already their separate and appropriate appellations. Thus it is sometimes said, 'I believe in my own existence and the existence of an external world, I believe in the facts of nature, the axioms of geometry, the affections of my own mind,' as well as 'I believe in the testimony of witnesses, or in the evidence of historical documents.'"

"Setting aside this loose application of the term, I propose to confine it, first, to the effect on the mind of the premises in what is termed probable reasoning, or what I have named contingent reasoning—in a word, the premises of all reasoning, but that which is demonstrative; and, secondly, to the state of holding true when that state, far from being the effect of any premises discerned by the mind, is dissociated from all evidence."—Bailey, Letters on Philosoph. of Hum. Mind, 8vo, 1851, p. 75; Essays on Formation of Opinions, 8vo, 1831.

Belief, in contradistinction to knowledge, always ought to indicate some case in which the objective evidence is incomplete, and of which the opposite does not imply either impossibility or absurdity. We cannot, accordingly, in propriety of language, say "I believe I have a pen in my hand and a sheet of paper before me," or I believe that two and two make four, or I believe in my own existence or the law of gravitation. "These are things which we know. . . . . We have used the adjective natural in connection with the word belief, to indicate that state of rational intelligence which comes next of

### BELIEF-

all to knowledge; which forms the transition point between positive knowledge and personal conviction."—Morell, *Mental Phil.*, p. 325.

BENEVOLENCE (benevolentia, well-wishing).—[The motive which prompts us to seek the good of others for its own sake.— Ed.] "When our love or desire of good goes forth to others, it is termed good-will or benevolence."—Cogan, On the Passions, part i. ch. 2.

Bishop Butler has said (Sermon i., On Human Nature), that "there are as real and the same kind of indications in human nature, that we were made for society and to do good to our fellow-creatures, as that we were intended to take care of our own life, and health, and private good." These principles in our nature by which we are prompted to seek our own good are comprehended under the name of Self-love, and those which lead us to seek the good of others are comprehended under the name of Benevolence. The Greek term was φιλανθρωπία, in the New Testament άγάπη, and among the Romans humanitas. Under these terms are comprehended all those feelings and affections which lead us to increase the happiness and alleviate the sufferings of others. According to some philosophers, our own good is the ultimate and only proper end of human actions, and when we do good to others it is done with a view to our own good. This is what is called The Selfish Philosophy, which in modern times has been maintained by Hobbes, Mandeville, Rochefoucault, and others. The other view, which is stated above in the words of Butler, has been strenuously defended by Cumberland, Hutcheson, Adam Smith, and Reid.

BIOLOGY (βίος λόγος, the science of life. See Whewell, Hist. of Scientific Ideas, ii. 174. Baden Powell (Order of Nature, essay i. sec. 4) protests against the use of the term Biology, on the ground that βίος does not mean vitality, but life as progressing in time.

BLASPHEMY (βλάπτω, to hurt; βλασφημέω, to hurt a man's good name,—hence to blaspheme). "Βλασφημία properly denotes calumny, detraction, reproachful or abusive language, against whomsoever it be vented."—Campbell, On the Gospels, Prelim. Dissert. ix. part ii.

Commonly, the wanton and irreverent use of language in

## BLASPHEMY-

reference to the Divine Being or to His worship and service.\* This offence against the light of nature was severely condemned by ancient ethical writers. Among the Jews, blasphemy was punished by death (Lev. xxiv. 14, 16). By the laws of many Christian nations it has been prohibited under heavy penalties. So late as the end of the seventeenth century, a man suffered death at Edinburgh for blasphemy.—See Arnot, Crim. Trials.

BODY.—"The primary ideas we have peculiar to body, as contradistinguished to spirit, are the cohesion of solid and consequently separable parts, and a power of communicating motion by impulse."—Locke, Essay on Hum. Understand., bk. ii. ch. 23.

"Body is the external cause to which we ascribe our sensations."—Mill, Logic, 2d ed. vol. i. p. 74.

Monboddo (Ancient Metaphys., bk. ii. ch. 1), distinguishes between matter and body, and calls body matter sensible, that is with those qualities which make it perceptible to our senses. This leaves room for understanding what is meant by a spiritual body, σωμα πνευματικόν, of which we read 1 Cor. xv. 44. He also calls body, "matter with form," in contradistinction to "first matter," which is matter without form.

Body is distinguished as physical, mathematical, and metaphysical. Physical body is incomplete or complete. Incomplete as in the material part of a living being; thus man is said to consist of body and mind, and life is something different from the bodily frame in animals and vegetables. Complete, when composed of matter and form, as all natural bodies are. Mathematical body is the threefold dimensions of length, breadth, and thickness. Metaphysical body is body as included under the predicament of substance, which it divides with spirit.—V. Matter, Mind, Spirit.

BONUM [Good], when given as one of the transcendental properties of being, means that God hath made all things in the best possible manner to answer the wisest ends, or that no thing is destitute of its essential properties, which meta-

<sup>\*</sup> Augustine said,—Jam vulgo b'asphemia non accipitur nisi mala verba de Dec dicere.

### BONUM-

physicians call perfections.—Hutcheson, Metaphys., pars 1, cap. 3.

Bonum Morale, or what is good, relatively to man, was distinguished into bonum jucundum, or what gives pleasure, as music; bonum utile, or what is advantageous, as wealth; and bonum honestum, or what is right, as temperance. These may be separate or conjoined in human actions.

Bonum Summum, the chief good.—This phrase was employed by ancient ethical philosophers to denote that in the prosecution and attainment of which the progress, perfection, and happiness of human beings consist. The principal opinions concerning it are stated by Cicero in his treatise De Finibus. See also Augustin, De Summo Bono.

Tucker, Light of Nature, has a chapter (27 of vol. i.), entitled "Ultimate Good," which he says is the right translation of summum bonum.

According to Kant, "virtue is not the entire complete good as an object of desire to reasonable finite beings; for, to have this character it should be accompanied by happiness, not as it appears to the interested eyes of our personality, which we couceive as an end of itself, but according to the impartial judgment of reason, which considers virtue in general, in the world, as an end in itself. Happiness and virtue, then, together constitute the possession of the sovereign good in an individual, but with this condition, that the happiness should be exactly proportioned to the morality (this constituting the value of the individual, and rendering him worthy of happiness). The sovereign good, consisting of these two elements, represents the entire or complete good, but virtue must be considered as the supreme good, because there can be no condition higher than virtue; whilst happiness, which is unquestionably always agreeable to its possessor, is not of itself absolutely good, but supposes as a condition, a morally good conduct."

BROCARD.—"I make use of all the brocardies, or rules of interpreters; that is, not only what is established regularly, in law, but what is concluded wise and reasonable by the best interpreters."—Jeremy Taylor, Preface to Ductor Dubitantium.

"To the Stoics and not to the Stagyrite, are we to refer the

# BROCARD-

first announcement of the brocard-In intellectu nihil est, quod non prius fuerit in sensu."—Hamilton, Reid's Works, note A, p. 772.

# CÆNESTHESIS.—V SENSATION, SENSUS COMMUNIS.

CAPACITY. - [Receptive power. Taking a twofold view of human power, faculty is power of acting: capacity is power

of receiving impression.—Ed.]

"The original power which the mind possesses of being taught, we call natural capacity; and this in some degree is common to all men. The superior facility of being taught, which some possess above the rest, we call genius. The first transition or advances from natural power, we call proficiency; and the end or completion of proficiency we call habit."-Harris, Philosoph. Arrang., ch. 8.

"From habit, necessarily results power or capacity (in Greek δύναμις), which Aristotle has distinguished into two kinds. The first is the mere capacity of becoming anything. The second is the power or faculty of energizing, according to the habit when it is formed and acquired; or, in other words, after the thing is become and actually exists, which at first was only in the capacity of cxisting."-Monboddo, Ancient Mctaphys., bk. i. ch. 4.

"There are powers which are acquired by use, exercise, or study, which are called habits. There must be something in the constitution of the mind necessary to our being able to acquire habits, and this is commonly called capacity."-

Reid, Intell. Pow., essay i. ch. 1.

Dr. Reid did not recognize the distinction of power as active or passive. But capacity is a passive power, or natural receptivity. A faculty is a power which we are conscious we can direct towards an end. A capacity is rather a disposition or aptitude to receive certain modifications of our consciousness, in receiving which we are passive. But an original capacity, though at first passive, may be brought under the influence of will and attention, and when so exercised it corresponds to a mental power, and is no longer a pure

### CAPACITY-

receptivity. In sensation, we are in the first instance passive, but our *capacity* of receiving sensations may be employed in various ways under the direction of will and attention, or personal activity.

cardinal (The) Virtues, Prudence, Temperance, Fortitude, and Justice, were so called from cardo, a hinge; because they were the hinges on which other virtues turned. Each one of them was a fons et principium, from which other virtues took their rise.

The four cardinal virtues are rather the necessary and essential conditions of virtue, than each individually a virtue. For no one can by itself be manifested as a virtue, without the other three.—Thurot, De l'Entendement, tom. i. p. 162.

The division of the virtues is as old as moral philosophy. It is found in the teaching of Socrates as recorded by Xenophon, with this difference, that εὐσέβεια or regard to the Deity holds the place of prudence or knowledge, which, united to virtue, forms true wisdom. Plato notices temperance, fortitude, and prudence, and in connection with or arising out of these, justice, which he considered not as the single virtue of giving all their due, but as the perfection of human nature and of human society. The term justice had been employed in the same large sense by Pythagoras, and the corresponding term righteousness, is used in Scripture to signify not one virtue, but all the virtues. The four cardinal virtues are alluded to in the Apocrypha, Wisdom, viii. 7.

The theological virtues are faith, hope, and charity; which

being added to the cardinal, make the number seven.

"Justice, temperance, fortitude, and prudence, the old heads of the family of virtues, give us a division which fails altogether; since the parts are not distinct, and the whole is not complete. The portions of morality so laid out, both overlap one another, or are undistinguishable; and also leave parts of the subject which do not appear in the distribution at all."—Whewell, Systemat. Mor., lec. iv.

Clodius, De Virtutibus quas Cardinales Appellant, 4to, Leips., 1815. Plethon, De Quatuor Virtutibus Cardinalibus,

Svo, Basl., 1552.

The cardinal or principal points of the compass are the North, South, East, and West.

# CARDINAL—

The cardinal numbers are one, two, three, &c., in opposition

to the ordinal, as first, second, third, &c.

CASUISTRY .- [Disputation as to conflicting duties. In the best sense, a system of the rational grounds for adjustment of such conflict. It does not imply dispute as to right and wrong, but presupposes the absence of dispute on the fundamental moral distinctions. - Ed.] A department of ethics-"the great object of which is to lay down rules or canons for directing us how to act wherever there is any room for doubt or hesitation."—Stewart, Act. Pow., bk. iv. ch. 5, sec. It is the science of cases, or of those special varieties which are for ever changing the face of actions as contemplated by general rules.— De Quincey, On Casuistry.

To casuistry, as ethical or moral, belongs the decision of what are called cases of conscience—that is, cases in which we are under obligation, but which, from the special circumstances attending, give rise to doubt whether or how far the obligation may be relaxed or dissolved-such as the obligation to keep a promise obtained by fraud, or extorted by

force.

"All that philosophy of right and wrong which has become famous or infamous under the name of Casuistry, had its origin in the distinction between Mortal \* and Venial Sin."—Cambridge Essays, 1856, p. 6; Maurice, The Conscience,

Lects. on Casuistry.

CATALEPSY (κατάληψις, catalepsy).—[Sudden physical prostration, affecting the whole nervous system, and involving loss of sensibility and voluntary motion.—ED.] The speculations of Berkeley and Boscovich on the non-existence of matter, and of Kant and others on the arbitrariness of all our notions, are interested in, for they appear to be confuted by, the intuitions of cataleptics. The cataleptic apprehends or perceives directly the objects around her; but they are the same as when realized through her senses. She notices no difference; size, form, colour, distance, are elements as real to her now as before. In respect again to the future, she sees it, but not in the sense of the annihilation of time; she foresees it; it is the future present to her; time she measures,

<sup>\*</sup> This subject is fully and clearly discussed by Mr. Jowett.—Epistles of St. Paul, vol. ii. pp. 351, 352.

### CATALEPSY—

present and future, with strange precision—strange, yet an approximation, instead of this certainty, would have been

more puzzling.

"So that it appears that our notions of matter, force, and the like, and of the conditions of space and time, apart from which we can conceive nothing, are not figurents to suit our human and temporary being, but elements of eternal truths.

—Mayo, On Popular Superstitions, p. 125, 8vo, 3d ed. Edin., 1851.

How far is the argument in the foregoing passage affected by the fact, that in sleep and in dreams we have sensations and perceptions in reference to objects which are not within the reach of the senses?

The paradox of Berkeley may be confuted in two ways:—First, by a reductio ad absurdum; second, no single existence can effect any change or event, and a change or effect of some kind there must be, in order to create those sensations or states of mind in which consciousness consists. There must, therefore, be something in existence foreign to ourselves, for no change, in other words, nothing which stands in the relation of cause and effect, is conceivable, but what is the result of two existences acting upon each other.

See Sir Gilbert Blane on Muscular Motion, p. 258, note.

CATEGOREMATIC (κατηγος έω, to predicate).—"A word is so called which may by itself be employed as a Term. Adverbs, Prepositions, &c., and also Nonns in any other case besides the Nominative, are Syncategorematic, i.e., can only form part of a Term."—Whatley, Log., bk. ii. ch. i. sec. 3.

# CATEGORICAL.—V. PROPOSITION.

[CATEGORICAL IMPERATIVE, (Imperativ Kategorisch).—The direct command—"Thou shalt," of the Moral Law.

"Such an Imperative as represents an action to be in itself necessary, and without regard to any what out of and beyond it."—Semple's Trans. of *The Metaphysic of Ethics*, new ed. p. 25.

"An imperative, which, irrespective of every ulterior end or aim, commands categorically."—Ib. p. 27; Kant's Sümmtliche Werke (Rosencranz) 8 th. 40; Grundlegung zur Metaphysik der Sitten, ii. abs.—Ed.]

CATEGORY (κατηγοςίω, to predicate), a class to which things or thoughts may be referred.

"So again the distribution of things into certain tribes, which we call categories or predicaments, are but cautions against the confusion of definitions and divisions."—Bacon, Adv. of Learning, bk. ii.

The categories are the highest classes to which all the objects of knowledge can be reduced, and in which they can be arranged in subordination and system. Philosophy seeks to know all things. But it is impossible to know all things individually. They are, therefore, arranged in classes, according to properties which are common to them. And when we know the definition of a class, we attain to a formal knowledge of all the individual objects of knowledge contained in that class. Every individual man we cannot know; but if we know the definition of man, we know the nature of man, of which every individual of the species participates; and in this sense we may be said to know all men. This attempt to render knowledge in some sense universal, has been made in all ages of philosophy, and has given rise to the categories which have appeared in various forms. They are to be found in the philosophy of Eastern nations, as a classification of things and of ideas. The categories of the followers of Pythagoras have been preserved by Aristotle in the first book of his Metaphysics. Those ascribed to Archytas are now regarded as apocryphal, and as having been fabricated about the beginning of the Christian era, to lower the reputation of Aristotle, whose categories are well known. They are ten in number, viz., -οὐσία, substance; πόσον, quantity; ποῖον, quality; πρὸς τί, relation; ποῦ, place; πότε, time; κεῖσθαι, situation; ἔχειν, possession, or manner of holding; ποίειν, action; and πάσχειν, suffering. The Mnemonic verses which contain them, are-

Arbor sex servos ardore refrigerat ustos Cras rure stabo, sed tunicatus ero.\*

<sup>•</sup> A humorous illustration of the categories is given by Cornelius to his pupil Martinus Seriblerus. Calling up the coachman, he asked him what he had seen at the bear-garden? The man answered that he had seen two men fight for a prize; one was a fair man, a sergeant in the Guards; the other black, a butcher; the sergeant had red breeches, the butcher blue; they fought upon a stage about four o'clock, and the sergeant wounded the butcher in the leg. Mark (quoth Cornelius) how the fellow runs through the predicaments—men (substantia)—two (quantitas)—fair and black (qualitas)—sergeant and butcher (relatio)—wounded the other (actio et passio)—fighting (situs)—stage (ubi)—four o'clock (quando)—blue and red breeches (habitus).

#### CATEGORY-

The categories of Aristotle are both logical and metaphysical, and apply to things as well as to words. Regarded logically, they are reducible to two, substance and attribute. Regarded metaphysically, they are reducible to being and accident. The Stoics reduced them to four, viz., substance, quality, manner of being, and relation. Plotinus attempted a new system. But the categories of Aristotle were acquiesced in till the time of Bacon, who recommended observation rather than classification. Descartes arranged all things under two great categories, the absolute and the relative. In the Port Royal Logic, seven categories are established. In more modern times the categories of Kant are well known. They are quantity, quality, relation, and modality. But they are purely subjective, and give merely a classification of the conceptions or judgments of the understanding. [According to Kant, the manifold is arranged by us in accordance with the logical functions of our judgment. "The categories are nothing else than these functions of judgment, so far as the manifold in a given intuition is determined in relation to them."-Kant's Critique of Pure Reason; Meiklejohn's Tr. p. 88; Werke, Rosencranz, ii. supplement 14, sec. 20, p. 740.— ED. ]

In the history of philosophy, the categories have been successively a classification universal of things, of words, of ideas, or of forms of thought. And a complete theory of classification, or a complete system of categories is still a desideratum.—Monboddo, Origin of Lang., vol. i. p. 520, and Ancient Metaphys., bk. iii. ch. 1.—V. PREDICAMENT, UNIVERSAL.

Sir William Hamilton (*Reid's Works*), p. 687, gives a deduction and simplification of the categories of Aristotle. See also *Discussions*, pp. 26, 27, 2d ed.; *Logic*, i. 199. 1. Being by itself; 2. Being by accident, the last including Quantity, Quality, and Relation.

Mr. Mill (Log., I. iii. ult.) gives the following classification of all nameable things:—1. Feelings or state of consciousness. 2. The minds which experience these feelings. 3. The bodies or external objects which excite certain of these feelings, together with the power or properties whereby they excite them. 4. The successions and co-existences, the like-

### CATEGORY-

nesses and unlikenesses, between feelings or states of consciousness.

CAUSE.—[Operating power. More strictly, Power which, in operating, originates new forms of being.—Ed.] The popular meaning I think I can express by a definition.—Causa est id, quo posito ponitur effectus, quo sublato tollitur. In the strict philosophical sense, I take a cause to be that which has the relation to the effect, which I have to my voluntary and deliberate actions.—Reid, Hamilton's ed., p. 76. [Cause is represented by Kant as a pure conception, that is a conception with which no sensation is mixed. As Hume had maintained that we have no knowledge of causes. Kant allows that there is no sensible object which we designate cause.—Ed.]

"The general idea of eause is, that without which another thing called the effect, cannot be; and it is divided by Aristotle (Metaphys., lib. v. cap. 2) into four kinds, known by the name of the material, the formal, the efficient, and the final. The first is that of which anything is made. Thus brass or marble are the material causes of a statue; earth, air, fire, and water, of all natural bodies. The formal cause is the form, idea, archetype, or pattern of a thing; for all these words Aristotle uses to express it. Thus the idea of the artist is the formal cause of the statue; and of all natural substances, if we do not suppose them the work of chance, the formal cause are the ideas of the Divine mind; and this form concurring with the matter, produces every work, whether of nature or art. The efficient cause is the principle of change or motion which produces the thing. In this sense the statuary is the cause of the statue, and the God of nature the cause of all the works of And lastly, the final cause is that for the sake of which anything is done. Thus the statuary makes the statue for pleasure or for profit; and the works of nature are all for some good end."-Monboddo, Ancient Metaphys., bk. i. ch. 4.

In Metaphys., lib. i. cap. 3, Aristotle says we may distinguish four kinds of causes. The first is the form proper to each thing. Τὸ τί ἢν εἶναι. This is the quidditas of the schoolmen, the causa formalis. The second is the matter and the subject. Ἡ τλη καὶ τὸ ὑποκείμενον, causa materialis. The third is the principle of movement which produced the thing.

#### CAUSE-

'Aρχὴ τῆς κινήσεως, causa efficiens. The fourth is the reason and good of all things; for the end of all phenomena and of all movement is good. Τό οὖ ἔνεκα καὶ τὸ ἀγαθόν, causa finalis. The sufficient reason of Leibnitz, which he, like Aristotle, thought to be essentially good.

In Metaphys., lib. iii. cap. 2, Aristotle says, "It is possible that one object may combine all the kinds of causes. Thus, in a house, the principle of movement is the art and the workmen, the final cause is the work, the matter the earth and stones, and the plan is the form." See also Nat. Auscult, lib. ii. cap.

3, quoted by Harris, Concerning Art, p. 24.

In addition to these four causes, Dr. Gillies (Analysis of Aristotle's Works, ch. 2, note, p. 100), says, "The model or exemplar was considered as a cause by the Pythagoreans and Platonists; the former of whom maintained that all perceptible things were imitations of numbers; and the latter, that they owed their existence to the participation of ideus; but wherein either this imitation or this participation consisted, these philosophers, Aristotle observes, omitted to show."

Seneca, *Epist.* 66 and 67, explains the common and Platonic divisions of causes; and arraigns both, because he conceived that space, time, and motion, ought to be included.

Sir W. Hamilton (*Reid's Works*, p. 690, note), says, "The exemplary cause was introduced by Plato; and was not adopted by the schoolmen as a fifth cause in addition to Aristotle's four." It is noticed by Suarez and others.

According to Derodon (De Prædicam., p. 114), material and formal causes are internal, and constitute the essence of a thing; efficient, final, and exemplary causes are external, that is, out from or of the essence of a thing. The material cause is that, ex quo, anything is, or becomes. The formal cause is that, per quod. The efficient cause is that, a quo. The final cause is that, propter quod. And the exemplary cause is that, ad cujus imitationem res fit.

When the word cause is used without an adjective, it commonly means, active power, that which produces change, or efficient cause. Suarez, Rivius, and others, define a cause thus:

—Causam esse principium per se influens csse in aliud. Wolfius thus:—Ens quod in se continct rationem, cur alterum existat,

CA USE-

dieitur hujus eausa. "A eause is that which, of itself, makes

anything begin to be."-Irons, Final eauses, p. 74.

[Hamilton says,-" Of second causes, there must always be at least a concurrence of two to constitute an effect."-Leets. on Metaphysies, ii. 408. "We think the causes to contain all that is contained in the effect."—Ib., 377.—Ed.]

We conceive of a eause as existing and operating before the effect which is produced. The question, Are cause and effect successive or simultaneous? is discussed by Dr. Whewell in Memoirs of the Cambridge Philosophical Society, vol. vii. part iii. The paper is inserted in his Hist. of Scient. Ideas, vol. i. pp. 192-204. See also Whately's Remains, p. 116.

"Though the antecedent is most strictly the eause of a thing being, as, e.g., the passage of the moon between the earth and the sun is the cause of an eclipse, yet the effect is that which commonly presents itself to us as the eause of our knowing it to be. Hence, by what seems to us a strange inversion of eause and effect, effect was said to be a cause, a causa eognoseendi, as distinguished from a eausa essendi, the strict eause."-Karslake, Aids to Study of Logic, vol. ii. p. 38 .- V. OCCASION.

CAUSALITY and CAUSATION .- [The act of originating new forms of existence.-Ed.]

Causality, in actu primo, is the energy or power in the cause\* by which it produces its effect; as heat in the fire. Causality, in actu secundo, is causation or the operation of the power by which the eause is actually producing its effect. It is influxus ille, a quo eausa influit esse in effectum quæ distinguitur a parte rei, tam a principio, quam a termino, sire ab effectu ad quem tendit. "The changes of which I am conscious in the state of my own mind, and those which I perceive in the external universe, impress me with a conviction that some eause must have operated to produce them. There is an intuitive judg-

<sup>\*</sup>The idea of the reason is not to be confounded with that of causality. It is a more elevated idea, because it applies to all orders of things, while causality extends only to things in time, It is true we speak sometimes of the eternal cause; but thus the idea of cause is synonymous with that of the reason, This idea of the reason expresses the relation of a being or thing to what is contained within it; in other words, the reason expresses the rapport du contenant au contenu, or the reason is that whose essence encloses the essence and existence of another thing. We thus arrive at the conception of all boing contained in God, who is the supreme reason.-Ahrens, Cours de Psycho!., tom. ii.-V. REASON.

# CAUSALITY and CAUSATION-

ment involving the simple idea of causation."-Stewart,

Philosoph. Essays, i. chap. 3.

From the explanation of these terms, it appears that a cause is something which not only precedes, but has power to produce the effect. The belief that every exchange implies a cause, or that every change is produced by the operation of some power, is regarded by some as a primitive belief, and has been denominated, the\* principle of causality. Hume, and others, however, have contended that we have no proper idea of cause as implying power to produce, nor of any necessary connection between the operation of this power and the production of the effect. All that we see or know is mere succession, antecedent and consequent; having seen things in this relation, we associate them together, and imagining that there is some vinculum or connection between them, we call the one the cause, and the other the effect. Dr. Thomas Brown adopts this view with the modification that it is in cases where the antecedence and consequence is invariable + that we attain to the idea of cause. Experience, however, can only testify that the succession of one thing to another has, in so far as it has been observed, been unvaried, not that in the nature of things it is invariable. "Invariableness can have place only where there are more instances of sequence than one; and therefore can have nothing to do with constituting the causal character of the individual sequences amongst which the relation of invariableness comes to subsist."—Sam. Bailey, Letters on Philosophy, 3d series, p. 50.

Mr Locke (Essay on Hum. Understand., bk. ii. chs. 21 and 26) ascribes the origin of our idea of cause to our expe-

by a similar change."-Brown, Inquiry, p. 13.

<sup>\*</sup>Lord Bacon (Nov. Organ., bk. ii. sec. 14), says, "There are some things ultimate and incausable."

<sup>†&</sup>quot; A cause, in the fullest definition which it philosophically admits, may be said to be that which immediately precedes any change, and which, existing at any time in similar circumstances, has been always, and will be always, immediately followed

<sup>&</sup>quot;Antecedency and subsequency are immaterial to the proper definition of cause and effect; on the contrary, although an object, in order to act as a cause, must be in being antecedently to such action; yet when it acts as a cause, its effects are synchronous with that action and are included in it, which a close inspection into the nature of cause will prove. For effects are no more than the new qualities of newly formed objects. Each conjunction of bodies (now separately in existence, and of certain defined qualities), produces upon their union these new natures, whose qualities must necessarily be in and with them in the very moment of their formation.

—Essay on Cause and Effect, 8vo, Lond, 1824, p. 50.

# CAUSALITY and CAUSATION—

rience of the sensible changes which one body produces on another, as fire upon wax. Our belief in an external world rests partly on the principal of causality. Our sensations are referred to external objects as their causes. Yet, the idea of power which is involved in that of cause, he traces to the consciousness of our possessing power in ourselves. This is the view taken of the origin of our idea of cause by Dr. Reid. "I take this notion of a cause to be derived from the power I feel in myself to produce certain effects."—Correspondence of Dr. Reid, p. 77; see also p. 81, Works, Hamilton, where he represents this as "the origin of the idea." By origin, however, Dr. Reid must have meant occasion. least he held that the principle of causality, or the belief that every change implies the operation of a cause, is a natural judgment, à priori conviction, necessary and universal. (V. infra). But if the idea of a cause be empirical and grounded on experience, it may be difficult to show how a higher origin can be claimed for the principle of causality. Mr. Stewart has expressed himself in language equivalent to that of Dr. Reid. And Maine de Biran (Nouvelles Considerat, sur le Rapport du Physique et du Moral de l'Homme, Svo, Par. 1834, pp. 274, 290, 363, 402), thinks that the true origin of our idea of cause is to be found in the activity of the will, or in the consciousness that we are causes, or have in ourselves the power of producing change. Having found the idea of power within the sphere of consciousness, we, by a process which he calls natural induction, project this idea into the external world, and ascribe power to that which we call cause. According to Kant we have the idea of cause, and also the belief that every commencing phenomenon implies the operation of a cause. But these are merely forms of our understanding, subjective conditions of human thought. In conformity with a pre-existing law of our intelligence, we arrange phenomena according to the relation of cause and effect. But we know not whether, independently of our form of thought, there be any reality corresponding to our idea of cause, or of productive power. The view that the idea of cause is furnished by the fact of our being conscious of possessing power, meets the idealism of Kant, for what greater reality can be conceived than a fact of consciousness?

# CAUSALITY and CAUSATION-

But if experience of external phenomena can be accepted as the origin (or rather as the occasion) of our notion of change, and if consciousness of internal phenomena can be accepted as the origin (or rather as the occasion) of our notion of power to produce change, the idea of a necessary and universal connection between change and the power which produces it, in other words, a belief in the principle of causality, can only be referred to the reason, the faculty which apprehends, not what is contingent and passing, but what is permanent and absolute.

"Cousin's theory concerning the origin of the idea of causality is that the mind, when it perceives that the agent and the change vary in cases of personal agency (though here he is not very explicit), several times repeated; while the relation between them, viz., the strict idea of personal causation, never varies, but is necessary; that the mind abstracts the invariable and necessary element from the variable and contingent elements of the fact, and thus arrives at the idea of causality."

—Essay on Causality, By an Undergraduate, 1854, p. 3.

[Causality, The Law of.—The rational principle that there must be power adequate for the production of everything which begins to be. Hamilton makes it refer to the sum of existence, rather than to power. He says, "when an object is presented phenomenally as commencing, we cannot but suppose that the complement of existence, which it now contains, has previously been."—Metaph., ii. 400.—Ed.]

"CAUSATION is not an object of sense. The only experience we can have of it is in the consciousness we have of exerting some power in ordering our thoughts and actions. But this experience is surely too narrow a foundation for a general conclusion, that all things that have had or shall have a beginning must have a cause. This is to be admitted as a first or self-evident principle."—Reid, Intell. Pow., essay vi. ch. 6.

Locke has said (Essay on Hum. Understand, bk. ii. ch. 21, sec. 4), "The idea of the beginning of motion we have only from reflection on what passes in ourselves, where we find by experience, that barely by willing it, barely by a thought of the mind, we can move the parts of our bodies which were before at rest."

See Cousin, Œuvres, Prem. Ser., tom. i. cours 1817, and

# CA USATION-

Hist. de Philosoph. Mod. sec. 19. See also on the various theories as to the origin of our judgment of cause and effect,

Sir Will. Hamilton, Discussions, App. 1.

CAUSES (Final, Doctrine of). -[Ends contemplated by the agent as the final results of his voluntarily directed effort. (An improper use of the word "Cause.")—Ed.] When we see means independent of each other conspiring to accomplish certain ends, we naturally conclude that the ends have been contemplated, and the means arranged by an intelligent agent; and, from the nature of the ends and of the means, we infer the character or design of the agent. Thus, from the ends answered in creation being wise and good, we infer not only the existence of an intelligent Creator, but also that He is a Being of infinite wisdom and goodness. This is commonly called the argument from design or from final causes. It was used by Socrates (see Xenophon, Memorabilia), and found a place in the scholastic philosophy. But Lord Bacon has said (De Aug. Scient., lib. iii. cap. 5), that the inquiry into final causes is sterile. And Descartes maintained that we cannot know the designs of God in creating the universe unless he reveal them to us. But Leibnitz, in maintaining the principle of sufficient reason, upheld the doctrine of final causes, and thought it equally applicable in physics and in metaphysics. It is true that in physical science we should prosecute our inquiries without any preconceived opinion as to the ends to be answered, and observe the phenomena as they occur, without forcing them into the service of an hypothesis. And it is against this error that the language of Bacon was directed. But when our contemplations of nature reveal to us innumerable adjustments and arrangements working out ends that are wise and good, it is natural to conclude that they have been designed by a cause sovereignly wise and good. Notwithstanding the doubts as to the logical validity of this argument, which have been started by Kant, Coleridge, and others, it continues to be regarded as the most popular and impressive mode of proving the being and perfections of God [rather of reasoning as to the perfections of the Deity.-Ed.] The validity of it is implied in the axiom of modern physiology, that there is no organ without its function. Everything has an end to

#### CA USES-

the attainment or accomplishment of which it continually tends. This is the form in which the doctrine of final causes

was advocated by Aristotle.

"If we are to judge from the explanations of the principle given by Aristotle, the notion of a final cause as originally conceived, did not necessarily imply design. The theological sense to which it is now commonly restricted has been derived from the place assigned to it in the scholastic philosophy; though, indeed, the principle had been long before beautifully applied by Socrates and by the Stoics to establish the truth of a Divine Providence. Whenever, indeed, we observe the adjustment of means to an end, we seem irresistibly impelled to conclude that the whole is the effect of design. The present acceptation, therefore, of the doctrine of final causes, is undoubtedly a natural one. it is not a necessary construction of the doctrine. Aristotle, accordingly, it is simply an inquiry into tendencies —an investigation of any object or phenomenon, from considering the Evera rov, the reason of it, in something else which follows it, and to which it naturally leads.

"His theory of final causes is immediately opposed to a doctrine of chance, or spontaneous coincidence; and must be regarded as the denial of that, rather than as a positive assertion of design. He expressly distinguishes, indeed, between thought and nature. He ascribes to nature the same working in order to ends, which is commonly regarded as the attribute of thought alone. He insisted that there is no reason to suppose deliberation necessary in these workings of nature, since it is 'as if the art of shipbuilding were in the timber, or just as if a person should act as his own physician.'"—Hampden, Introd. to Mor. Phil., lect. iv. p. 113.

"The argument from final causes," says Dr Reid (Intell. Pow., essay vi. ch. 6), "when reduced to a syllogism, has these two premises:—First, that design and intelligence in the cause may, with certainty, be inferred from marks or signs of it in the effect. This we may call the major proposition of the argument. The second, which we call the minor proposition, is, that there are in fact the clearest marks of design and wisdom in the works of nature; and the conclu-

# UA USES-

sion is, that the works of nature are the effects of a wise and intelligent cause. One must either assent to the conclusion,

or deny one or other of the premises."

"After all, it were to be wished that the scholastic phrase final cause could without affectation be dropped from our philosophical vocabulary; and some more exceptionable mode of speaking substituted for it."-Stewart, Elements, ii. 4, 6.

Hampden, Introd. to Mor. Phil., pp. 110-113; Irons, Doctrine of Final Causes, 8vo, Lond., 1856. The argument from design is prosecuted by Paley, in Nat. Theol.; in Bridgewater Treatises; Burnett Prize Essays; Whewell's

Induct. Sciences, ii. p. 90.

CAUSES (Occasional, Doctrine of).—This phrase has been employed by the Cartesians to explain the mode of communicating between mind and matter. The soul being a thinking substance, and extension being the essence of body, no intercourse can take place between them without the intervention of the First Cause. It is Deity himself, therefore, who, on the occasion of certain modifications in our minds, excites the corresponding movements of body; and, on the occasion of certain changes in our body, awakens the corresponding feelings in the mind. This theory, which is involved in the philosophy of Descartes, was fully developed by Malebranche, Regis, and Geulinx. Laforge limited the theory to involuntary movements, and thus reconciled it in some degree to experience and common sense. Malebranche's doctrine is commonly called the "vision of all things in God"—who is the "light of all our seeing."—Descartes, Principia, pars ii. § 36 ; Malebranche, Recherche de la Vérité, vi. 2, 3; Hamilton's Lects. on Metaph., i. 300.

CERTAINTY, CERTITUDE (Certum (from cerno), proprie idem sit, quod decretum ac proinde firmum. Vossius).-[Personal assurance of reality, possessed in the exercise of immediate knowledge, or attained by the ingathering of sufficient evi-

dence.-Ed.]

" Certain, in its primary sense, is applied (according to its etymology, from cerno), to the state of a person's mind ; denoting any one's full and complete conviction; and generally, though not always, implying that there is sufficient

ground for such conviction. It was thence easily transferred metonymically to the truths or events, respecting which this conviction is rationally entertained. And uncertain (as well as the substantives and adverbs derived from these adjectives) follows the same rule. Thus we say, 'It is certain,' &c., meaning that we are sure; whereas the fact may be uncertain and certain to different individuals. From not attending to this, the words uncertain and contingent have been considered as denoting some quality in the things themselves—and chance has been regarded as a real agent."—Whately, Log., App. 1.—V. Locke's Essay, bk. ii. ch. 6, and bk. iii. ch. 4.

"Certainty is truth brought methodically to the human intellect, that is, conducted from principle to principle, to a point which is evident in itself. It is the relation of truth to knowledge, of God to man, of ontology to psychology."—

Tiberghien, Essai des Connais. Hum., p. 35.

"In accurate reasoning, the word certain ought never to be used as merely synonymous with necessary. Physical events we call necessary, because of their depending on fixed causes, not on known causes; when they depend also on known causes, they may be called certain. The variations of the weather arise from necessary and fixed causes, but they are proverbially uncertain."—Coplestone, Remains, 8vo, Lond., 1854, p. 98.

When we affirm, without any doubt, the existence or nonexistence of a being or phenomenon, the truth or falsity of a proposition, the state in which our mind is we call certaintyand we say of the object of knowledge that it is evident or certain. According to the mode in which it is attained, certainty is immediate by sense and intuition, and mediate by reasoning and demonstration. According to the grounds on which it rests, it is called metaphysical, when we firmly adhere to truth which cannot be otherwise; such as the first principles of natural law, or the difference between right and wrong. Physical, when we adhere to truth which cannot be otherwise, according to the laws of nature, but which may be by miracle; as, fire will certainly burn-although it did not burn the Hebrew youths (Dan. iii.). Moral, when we adhere to truth which is in accordance with the common order of things, and the common judgment of men [as

subject to the law of moral life]—although it may be otherwise without a miracle.

Moral certainty may amount to the highest degree of probability, and to all practical purposes may be as influential as certainty. For it should be observed that probability and certainty are two states of mind, and not two modes of the reality. The reality is one and the same, but our knowledge of it may be probable or certain. Probability has more or less of doubt, and admits of degrees. Certainty excludes doubt, and admits neither of increase nor diminution.

Certain knowledge or certainty is the confidence with which the mind reposes in the information of its faculties. Self-consciousness reveals with certainty the different states and operations of our own minds. The operations of memory may give us certainty as to the past. We cannot doubt the reality of what our senses clearly testify. Reason reveals to us first truths with intuitive certainty. And by demonstration we ascend with certainty from one truth to another. For to use the words of Thomas Aquinas (De Veritate), "Tunc conclusiones pro eerto seiuntur, quando resolvuntur in principia, et ideo, quod aliquod per certitudinem seiatur, est ex lumine rationis divinitus interius indito, quo in nobis loquitur Deus, non autem ab homine exterius docente, nisi quatenus conclusiones in principia resolvit, nos doecns, ex quo tamen nos certitudinem non acciperimus, nisi in nobis esset ecrtitudo principiorum, in quæ eonelusiones resolvuntur."

"The criterion of true knowledge is not to be looked for anywhere abroad without our own minds, neither in the height above, nor in the depth beneath, but only in our knowledge and conception themselves."—Cudworth, Eternal and Immutable Mor., bk. iv. ch. 5.

"De veritatis criterio frustra laborantur quidam: quum non alia reperienda sit præter ipsam rationis facultatem, aut menti congenitam intelligendi vim."—Hutcheson, Metaphys., pars i. cap. 2.

"The theories of eertitude may be reduced to three classes. The first places the ground of ecrtitude in reason; the second in authority; the third in evidence, including, under that term, both the external manifestations of truth, and the internal principles or laws of thought by which we are

determined in forming our judgments in regard to them."—Buchanan, Faith in God, vol. ii. p. 304.

Protagoras and Epicurus in ancient times, and Hobbes and the modern sensationalists, have made sense the measure and ground of certainty. Descartes and his followers founded it on self-consciousness, Cogito ergo sum; while others have received as certain only what is homologated by human reason in general. But certainty is not the peculiar characteristic of knowledge furnished by any one faculty, but is the common inheritance of any or all of our intellectual faculties when legitimately exercised within their respective spheres. When so exercised we cannot but accept the result as true and certain.

But if we are thus naturally and necessarily determined to accept the knowledge furnished by our faculties, that knowledge, according to Kant, cannot be proved to be absolute, or a knowledge of things in themselves, and as they must appear to all intelligent beings, but is merely relative, or a knowledge of things as they appear to us. Now, it is true that we cannot, as Kant has expressed it, objectify the subjective. Without rising out of human nature to the possession of a higher, we cannot sit in judgment on the faculties of that nature. But in admitting that our knowledge is relative, we are merely saying it is human. It is according to the measure of a man. It is attained by human faculties, and must be relative, or bear proportion to the faculties by which it is attained. In like manner, the knowledge of angels may be called angelic, but this is not to call it uncertain. We may not know all that can be known of the objects of our knowledge, but still, what we do know, we may know with certainty. Human knowledge may admit of increase without being liable to be contradicted or overturned. We come to it by degrees, but the higher degree of knowledge to which we may ultimately attain, does not invalidate the lower degree of knowledge. It rests upon it and rises out of it, and the ground and encouragement of all inquiry is, that there is a truth and reality in things, which our faculties are fitted to apprehend. Their testimony we rejoice to believe. Faith in their trustworthiness is spontaneous. Doubt (concerning it is an after-thought. And scepticism as a creed is self-destruc-

tive. He who doubts is certain that he doubts. Omnis qui utrum sit veritus dubitat, in se ipso habet verum, unde non dubitet.—Augustin, De vera Religione.

Etiam qui negat veritatem esse, concedit veritatem esse; si enim veritas non est, verum est, veritatem non esse.—Thomas Aquin., Sum. Theol.; Savary, Sur la Certitude, 8vo, Paris,

1847.—V. EVIDENCE, CRITERION, KNOWLEDGE.

CHANCE [a name under which are classified events the occurrence of which can not be computed by application of known natural law. Events are referred to "chance" in acknowledgment at once of causality, and of ignorance which restricts us to the statement,—"they happened."—Ed.] Aristotle says, "According to some, chance is a cause not manifest to human reasoning." Δοχεῖ μὲν αἰτία ἡ τύχη, ἄδηλον δὲ ἀνθεωπίνη

διανοία.-Phys., ii. 4.

"Many things happen, besides what man intends or purposes; and also some things happen different from what is aimed at by nature. We cannot call them natural things, or from nature, neither can we say that they are from human intention. They are what we call fortuitous events, and the cause which produces them is called *chance*. But they have all respect to some end intended by nature or by man. So that nothing can be more true than what Aristotle says (*Phys.*, lib. ii.), that if there were no end intended, there could be no *chance*.

"A man digs a piece of ground, to sow or plant it; but, in digging, he finds a treasure. This is beside his inten-

tion, and therefore it is said to be by chance.

When a hanging wall falls upon a passenger and crushes him, the destination of nature was only, that the stones of the wall being no longer kept together by the cement, should fall to the ground, according to their natural movement; so that the crushing of the man was something beside the purpose of nature, or  $\pi \alpha \rho \alpha \rho \omega \rho \nu$ ."—Monboddo, Ancient. Metaphys., bk. ii. ch. 20.

As to Aristotle's views of fortune and chance, see Piccolominens, Philosoph. de Moribus, 1583, p. 713; Boethius, De

Consol.. lib. v.

Chance is opposed to law in this sense, viz., that what happens according to law may be predicted, and counted on.

### CHANCE—

But everything has its own law and its proper cause; and chance merely denotes that we know not the proper cause, nor the law according to which a phenomenon occurs.

An event or series of events which seems to be the result neither of a necessity inherent in the nature of things, nor of a plan conceived by intelligence, is said to happen by chance.

"It is not, I say, merely in a pious manner of expression, that the Scripture ascribes every event to the providence of God; but it is strictly and philosophically true in nature and reason, that there is no such thing as *chance* or accident; it being evident that these words do not signify anything that is truly an agent or the cause of any event; but they signify merely men's ignorance of the real and immediate cause."—Clarke, vol. i. ser. xcviii.

"If a die be thrown, we say it depends upon chance what side may turn up; and, if we draw a prize in a lottery, we ascribe our success to chance. We do not, however, mean that these effects were produced by no cause, but only that we are ignorant of the cause that produced them."—Arthur, Discourses, p. 17.

In what sense we may say there is such a thing as chance, and in what sense not, see M'Cosh, Typical Forms, p. 40; Mill, Log., bk. iii. ch. 17.

CHANCES (Theory of).—"The theory of chances consists in reducing all events of the same kind to a certain number of cases equally possible, that is, such that we are equally undecided as to their existence; and in determining the number of these cases which are favourable to the event of which the probability is sought. The ratio of that number to the number of all the possible cases, is the measure of the probability; which is thus a fraction, having for its numerator the number of cases favourable to the event, and for its denominator the number of all the cases which are possible."—Laplace, Essai Phil. sur les Probabilités, 5th ed. p. 7; Hume, Essay on Probability.

CHARITY (ἀγάπη, caritas), as one of the theological virtues, is a principle of prevailing love to God, prompting to seek His glory and the good of our fellow-men.

Sometimes it is used as synonymous with brotherly love,

# CHARITY-

or that principle of benevolence which leads us to promote, in all possible ways, the happiness of others.

In a more restricted sense it means almsgiving, or relieving the wants of others by communication of our means and substance.

CHASTITY is the duty [or virtue] of restraining and governing the appetite of sex. It includes purity of thought, speech, and behaviour. Laseivious imaginings, and obseene conversation, as well as incontinent conduct, are contrary to the duty of chastity.

CHOICE—[voluntary selection from a variety of objects, often used as synonymous with *volition*. Properly, *choice* applies to things, *volition* to forms of action.—Ed.]

"The necessity of continually choosing one of the two, either to act or to forbear acting, is not inconsistent with or an argument against liberty, but is itself the very esseence of liberty."—Clarke, Demonstration, prop. 10.

"For the principle of deliberate choice, Aristotle thought that the rational and irrational should concur, producing "orectic intellect," or "dianoctic appetite," of which he emphatically says,—"And this principle is man."—Catholic Philosophy, p. 46. [Aristotle's Nic. Eth., iii. 2, for exposition of προαίρεσις, deliberate preference, and Ib. vi. 2, 5, for the passage here referred to, where it is needful to keep in view the dispute as to the authorship of books v., vi., and vii.—Ed.]

Mr Loeke says, "The will signifies nothing but a power or ability to prefer or choose." And in another passage he says, "The word preferring seems best to express the act of volition; yet it does not precisely, for though a man would prefer flying to walking, yet who can say he ever wills it?"—By Jonathan Edwards (Essay on Freedom of Will, sec. 1) choice and volition are completely identified. But, in popular language, choosing or preferring may mean—1. A conclusion of the understanding; as when I say—I prefer or choose peaches rather than plums; i.e., I reckon them a better and safer fruit.—2. A state of inclination or sensibility; as, I prefer or choose plums rather than pears; that is, I like them better; or—3. A determination of will; as, I prefer or choose pears, meaning that, with the offer of other fruits, I take this. It is only in the latter sense that choice and

### CHOICE-

volition are the same.—See Tappan, Appeal to Consciousness,

ch. 3, sec. 4, 5.

"Choice or preference, in the proper sense, is an act of the understanding; but sometimes it is improperly put for volition, or the determination of the will in things where there is no judgment or preference; thus, a man who owes me a shilling, lays down three or four equally good, and bids me take which I choose. I take one without any judgment or belief that there is any ground of preference; this is merely an act of will, that is, a volition."—Correspondence of Dr Reid, p. 79.

"To prefer is an act of the judgment; and to choose is an act of the will. The one describes intellectual, and the

other practical decision."—Taylor, Synonyms.

CHREMATISTICS (χρημα, goods), is the science of wealth. It is more commonly called Political Economy, that department of science which treats of the resources of a country, and of the best means of increasing them, and of diffusing them most beneficially among the inhabitants.

called the lesser moralities. It springs from benevolence or brotherly love, and manifests itself by kindness and con sideration in manner and conversation towards others. It is distinguished into natural and conventional. It is opposed to rudcness. Dr Ferguson says civility avoids giving offence by our conversation or manner. Politeness seeks to please. [Institutes of Mor. Philos., part vi. ch. 5.]—Knox, Essays, No. 95; Trench's Select Glossary.

CLASSIFICATION (κλῆσις, classis, from καλέω, to call, a multitude called together).

"A class consists of several things coming under a common description."—Whately, Log., bk. i. sec. 3.

"The sorting of a multitude of things into parcels, for the sake of knowing them better, and remembering them more easily, is classification. When we attempt to classify a multitude of things, we first observe some respects in which they differ from each other; for we could not classify things that are entirely alike, as, for instance, a bushel of peas; we then separate things that are not alike, and bring together things that are similar."—Taylor, Elements of Thought.

### CLASSIFICATION-

"In every act of classification, two steps must be taken; certain marks are to be selected, the possession of which is to be the\* title to admission into the class, and then all the objects that possess them are to be ascertained. When the marks selected are really important and connected closely with the nature and functions of the thing, the classification is said to be natural; where they are such as do not affect the nature of the objects materially, and belong in common to things the most different in their main properties, it is artificial."—Thomson, Outline of Laws of Thought, 2d ed. p. 377.

The condition common to both modes of classification, is to comprehend everything and to suppose nothing. But the rules for a natural classification are more strict than for an artificial or arbitrary one. We may classify objects arbitrarily in any point of view in which we are pleased to regard them. But a natural classification can only proceed according to the real nature and qualities of the objects. The advantages of classification are to give a convenient form to our acquirements, and to enlarge our knowledge of the relations in which different objects stand to one another. A good classification should—1st, Rest on one principle or analogous principles. 2d, The principle or principles should be of a constant and permanent character. 3d, It should be natural, that is, even when artificial, it should not be violent or forced. 4th, It should clearly and easily apply to all the objects classified.

The principles on which classification rests are these:—1st, of Generalization; 2d, of Specification; and 3d, of Continuity.

Classification proceeds upon observed resemblances. Generalization rests upon the principle, that the same or similar causes will produce similar effects.—Mill, Log., bk. i. ch. 7, sec. 4; M'Cosh, Typical Forms, bk. iii. ch. 1.

COGNITION (cognosco, to know). [Knowledge, in its widest

<sup>\*</sup> Abstraction, generalization, and definition, precede classification; for if we wish to reduce to regularity the observations we have made, we must compare them, in order to unite them by their essential resemblances, and express their essence with all possible precision. We might classify a library by dividing the books into history and philosophy. History into ancient and modern; ancient, according to the people to whom it referred, and modern into general, particular, and individual, or memoirs These divisions and subdivisions might be called a classification.

## COGNITION-

sense, embracing sensation, perception, conception, notion.— Ed.] "According to Kant, cognition (*Erkenntniss*) is the determined reference of certain representations to an object, that is, that object in the conception whereof the diverse of a given intuition is united. *Erkenntniss-vermögen* is the cognition faculty, or the faculty of cognition. To cognize, is to refer a perception to an object by means of a conception. For cognizing, understanding is required. A dog *knows* his master, but he does no *cognize* him.

Representing something to one's self (vorstellen) is the first degree of cognition; representing to one's self with consciousness (wahrnehmen), or perceiving, is the second; knowing (kennen) something, or representing to one's self something in comparison with other things, as well in respect of identity as difference, is the third; cognizing (erkennen) or knowing something with conscionsness, the fourth; nnderstanding (verstanden) cognizing through the understanding by means of the conceptions, or conceiving something, the fifth; cognizing something through reason or perspecting (einselen), the sixth; and comprehending something (begreifen) that is, cognizing it through reason à priori in a degree sufficient for our purpose, the seventh. For all our comprehending is only relative, that is sufficient for a certain purpose; absolutely we do not comprehend anything.-Haywood, Crit. of Pure Reason, p. 593, 2d ed.

"Cognition, when we find it needful to separate it from faith, might be confined in strictness to those mental energies in which the mind looks on an object now present—say on a body perceived by the senses, or on self in a particular state, or on a representation in the mind; and thus faith would be applied to all those exercises in which we believe in the existence of an object not now before us, and under immediate inspection."—M'Cosh, Intuitions, p. 196.

by Dr Whewell to denote the binding together groups of facts by means of some snitable conception.—Thomson, Outline of Laws of Thought, 2d ed., p. 353; Whewell, Nov. Org. Rem., p. 60.

combination and connection of ideas are phrases to be found in bk. ii. ch. 33, of Locke's Essay, in which he

# COMBINATION-

treats of what is more commonly called Association of Ideas,—

a.v.

The phrase Association of Ideas seems to have been introduced by Locke. It stands as the title to one of the chapters in his Essay on the Human Understanding. But in the body of the chapter he uses the phrase combination of ideas. These two phrases have reference to the two views which may be taken of the train of thought in the mind. In both, under ideas are comprehended all the various modes of consciousness. In treating of the association of ideas, the inquiry is as to the laws which regulate the succession or order according to which one thought follows another. But, it has been observed, that the various modes of consciousness not only succeed in some kind of order, but that they incorporate themselves with one another so as to form permanent and almost indissoluble combinations.

"When many impressions or ideas are operating in the mind together, there sometimes takes place a process of a similar kind to chemical combination. When impressions have been so often experienced in conjunction, that each of them calls up readily and instantaneously the ideas of the whole group, these ideas sometimes melt and coalesce into one another, and appear not several ideas, but one; in the same manner as when the seven prismatic colours are presented to the eye in rapid succession, the sensation produced is that of white. But, as in this last case, it is correct to say, that the seven colours, when they rapidly follow one another, generate white, but not that they actually are white; so it appears to me that the Complex Idea, formed by the blending together of several simple ones, should, when it really appears simple (that is, when the separate elements are not consciously distinguishable in it), be said to result from, or to be generated by, the simple ideas, not to consist of them. Our idea of an orange really consists of the simple ideas of a certain colour, a certain form, a certain taste, and smell, &c., because we can by interrogating our consciousness, perceive all these elements in the idea. But we cannot perceive, in so apparently simple a feeling as our perception of the shape of an object by the eye, all that multitude of ideas derived from other senses, without which, it is well ascertained, that no

### COMBINATION-

such visual perception would ever have had existence; nor in our idea of extension can we discover these elementary ideas of resistance derived from our muscular frame, in which Dr Brown has shown it to be highly probable that the idea originates. These, therefore, are cases of mental chemistry, in which it is proper to say that the simple ideas generate, rather than that they compose, the complex ones."—Mill, Log., bk. vi. ch. 4, sec. 4.

Suppose, that, in cating an apple we had made use of a fruit knife; a connection comes to be established in our minds between an apple and a fruit knife; so that when the idea of the one is present, the idea of the other also will appear; and these two ideas are said to be associated in the

way of combination.

Or, the same kind of connection may be established between two feelings, or between a cognition and a feeling, or between a feeling and a volition,—between any two or more mental movements.

In cutting an apple, we may have wounded our finger; and afterwards, the sight of an apple will raise a sense or feeling of the wound. Having eaten of honey, we have afterwards suffered pain; and, when honey is again presented, there will be a feeling of dislike, and a purpose to abstain from it.

The association, which thus takes place between different mental movements, is more than mere juxtaposition of separate things. It amounts to a perfect combination or fusion. And, as in matter, compounds have properties which are not manifested by any of the component parts in their separate state, so it is in mind; the result of various thoughts and feelings being fused into one whole, may be to produce a new principle, with properties differing from the separate influence of each individual thought and feeling. In this way, many secondary and factitious principles of action are formed.

COMMON SENSE [sensus communis, κοινή ἄισθησις] is a phrase employed to denote that degree of intelligence, sagacity, and prudence, which is common to all men. [The word "sense" is here used as equivalent to cognitive power in its widest acceptation. "Common Sense" is the cognitive power common to humanity. Popular usage, in making it equivalent to sagacity, and thus a mark of distinction among men, is

# COMMON SENSE-

opposed to the philosophic use.—Ed.] "This phrase, common sense," meant once something very different from that plain wisdom, the common heritage of men, which now we call by this name, having been bequeathed to us by a very complex theory of the senses, and of a sense which was the common bond of them all, and which passed its verdicts on the reports which they severally made to it." Trench, Glossary of English Words.

"There is a certain degree of sense which is necessary to our being subjects of law and government, capable of managing our own affairs, and answerable for our conduct to others. This is called *common sense*, because it is common to all men with whom we can transact business.

"The same degree of understanding which makes a man capable of acting with common prudence in life, makes him capable of discerning what is true and what is false in matters that are self-evident, and which he distinctly apprehends."—Reid, *Intell. Pow.*, essay vi. ch. 2.

"It is by the help of an innate power of distinction that we recognize the differences of things, as it is by a contrary power of composition that we recognize their identities. These powers, in some degree, are common to all minds; and as they are the basis of our whole knowledge (which is, of necessity, either affirmative or negative), they may be said to constitute what we call common sense."—Harris, Philosoph. Arrange., ch. 9; Hamilton's Reid's Works, note A, p. 750.

common sense (The Philosophy of) is that philosophy which accepts the testimony of our faculties as trustworthy within their respective spheres, and rests all human knowledge on certain first truths or primitive beliefs, which are the constitutive elements or fundamental forms of our rational nature, and the regulating principles of our conduct. [Applied specially to the Philosophy of "the Scotch School," as distinguished for an ultimate appeal to consciousness, and to the principles of intelligence common to the mind of man.—V. The Scottish Philosophy, M'Cosh.—Ed.]

"As every ear not absolutely depraved is able to make some general distinctions of sound; and, in like manner, every eye, with respect to objects of vision; and as this general use of these faculties, by being diffused through all individuals,

### COMMON SENSE-

may be called common hearing and common vision, as opposed to those more accurate energies, peculiar only to artists; so fares it with respect to the intellect. There are truths or universals of so obvious a kind, that every mind or intellect not absolutely depraved, without the least help of art, can hardly fail to recognize them. The recognition of these, or at least the ability to recognize them, is called vous xouvés, common sense, as being a sense common to all except lunatics and idiots.

"Further, as this power is called  $\varkappa o \imath v o \widetilde{\nu}_{5}$ , so the several, propositions which are its proper objects, are called  $\pi \varrho o \lambda \acute{n} \psi \epsilon \iota \varsigma$ , or pre-conceptions, as being previous to all other conceptions. It is easy to gather from what has been said that those  $\pi \varrho o \lambda \acute{n} \psi \epsilon \iota \varsigma$  must be general, as being formed by induction; as also natural, by being common to all men, and previous to all instruction—hence, therefore, their definition. A pre-conception is the natural apprehension of what is general or universal."—Harris, On Happiness, p. 46.

A fundamental maxim of the Stoics was, that there is nothing in the intellect which has not first been in the sense. They admitted, however, natural notions, which they called anticipations, and artificial notions formed in us by the understanding. They also recognized notions which all men equally receive and understand. These cannot be opposed to one another; they form what is called common sense.—Bouvier, Hist. de la Philosoph., tom. i. p. 149, 8vo, Paris, 1844.

"A power of the mind which perceives truth, not by progressive argumentation, but by an instinctive and instantaneous impulse; derived neither from education nor from habit, but from nature; acting independently upon our will, whenever the object is presented, according to an established law; and, therefore, not improperly, called a sense, and acting in the same manner upon all mankind; and, therefore, properly called common sense, the ultimate judge of truth."—Beattie, Essay on Truth, pp. 36-42.

"Common sense," says Mons. Jaques (Mem. de l'Academ., Roy. des Seiences Mor. et Pol., tom. i. p. 349, Paris, 1841), "is the unanimous sentiment of the whole human race, upon facts and questions which all may know and resolve—or, more precisely, it is the ensemble (complement) of notions and

# COMMON SENSE-

opinions common to all men of all times and places, learned or ignorant, barbarous or civilized. Spontaneity, impersonality, and universality, are the characteristics of truths of common sense; and hence their truth and certainty. The moral law, human liberty, the existence of God, and immortality of the soul, are truths of common sense."

On the nature and validity of the common sense philosophy, see Reid's Works by Sir W. Hamilton, App. note A; Oswald, Appeal to Common Sense; Beattie, Essay on Truth, &c.

COMMON.—V. TERM.

compact (compingo, to bind close), is that by which or to which men bind or oblige themselves. It is a mutual agreement between two or more persons to do or to refrain from doing something.—V. Pact, Contract.

to another, in order to discover some relation subsisting between them. It is a voluntary operation of the mind, and thus differs from the perception or intuition of relations, which does not always depend upon the will. The result of comparison is knowledge, which the intellect apprehends, but the act is an exercise of attention voluntarily directing the energy of the mind to a class of objects or ideas [and attended by judgment.] The theorems of mathematics are a series of judgments arrived at by comparison, or viewing different quantities and numbers in their relations. The result of comparison is a judgment.

COMPASSION.-V. SYMPATHY.

put together as to form a whole, is called complex. Complex things are the subjects of analysis. The analysis of complex notions is one of the first and most important exercises of the understanding."—Taylor, Elements of Thought; M'Cosh. Intuitions, p. 158.

COMPREHENSION means the act of comprehending or fully understanding any object or idea.—V. APPREHENSION. For the sense in which it is used by the logicians, V. Extension.

COMPUNCTION (compungo, to prick or sting), is the pricking or uneasy feeling [of the conscience] on account of something wrong being done. "All men are subject more or less to compunctions of conscience."—Blair.

#### COMPUNCTION-

"Stop up th' access and passage to remorse That no compunctious visitings of nature Shake my fell purpose."—Macbeth.

CONCEPTION .-- (con, and capio).

conceiving.—[The act of gathering up in a single mental representation the qualities which are characteristic either of one object, or of many objects. Conception has been used for the act, and concept for the thing conceived. Conception and notion have commonly been taken as synonymous. It would be better to reserve "notion" for the more generalised knowledge, expressed in general or abstract terms. The German name is Begriff, the gathering together, as if into a single grip, or form of knowledge, the properties common to a species or genus.—Ed.] Dr. Reid begins his essay on Conception by saying, "Conceiving, imagining, apprehending, and understanding, having a notion of a thing, are common words used to express that operation of the understanding which the logicians call simple apprehension."

In reference to this it has been remarked by Mr. Mansel (Prolegom. Log., p. 24), that "conception must be distinguished as well from mere imagination, as from a mere understanding of the meaning of words.\* Combinations of attributes logically impossible, may be expressed in language perfectly intelligible. There is no difficulty in understanding the meaning of the phrase bilinear figure, or iron-gold. The language is intelligible, though the object is inconceivable. On the other hand, though all conception implies imagination. yet all imagination does not imply conception. To have a conception of a horse, I must not only know the meaning of the several attributes constituting the definition of the animal, but I must also be able to combine these attributes in a representative image, that is, to individualize them. This, however, is not mere imagination, it is imagination relatively to a concept. I not only see, as it were, the image with the mind's eye, but I also think of it as a horse, as possessing the attributes of a given concept, and called by the name expressive of them. But mere imagination is possible without any such relation. My mind may recall a sensible impression on whose constituent features I have never reflected, and

<sup>\*</sup> These have been confounded by Aldrich, and Reid, and others.

### CONCEIVING-

relatively to which I have never formed a concept or applied a name. Imagination would be possible in a being without any power of distinguishing or comparing his presentations; it is compatible with our ignorance or forgetfulness of the existence of any presentations, save one represented by the image. Conception, in its lowest degree, implies at least a comparison and distinction of this from that. Conception proper thus holds an intermediate place between the intuitive and symbolical knowledge of Leibnitz, being a verification of the latter by reference to the former."—Mansel, Prolog. Log., p. 24.

"The words conception, concept, notion, should be limited to the thought of what cannot be represented in the imagination, as the thought suggested by a general term. The Leibnitzians call this symbolical, in contrast to intuitive knowledge. This is the sense in which conceptio and conceptus have been usually and correctly employed."—Sir W. Hamilton, Reid's

Works, p. 360, note. [Hamilton's Logic, i. 40.]

CONCEPT, A, "is a collection of attributes, united by a sign, and representing a possible object of intuition."—Mansel, Prole-

gom. Log., p. 60.

It was used, or *conceit* as synonymous with it, by the older English writers. See Baynes, Essay on Analytic of Log. Forms, 8vo, Edin., 1850, pp. 5, 6; Sir W. Hamilton,

Reid's Works, p. 393.

Kant and his followers, while they reserve the word idea to denote the absolute products of the reason, and intuition to denote the particular notions which we derive from the senses, have applied the word concept (begriff) to notions which are general without being absolute. They say they are of three kinds,—1, Pure concepts, which borrow nothing from experience; as the notions of cause, time, and space.

2. Empirical concepts, which are altogether derived from experience; as the notion of colour or pleasure. 3. Mixed concepts, composed of elements furnished partly by experience, and partly by the pure understanding. See Schmid, Dictionnaire pour servir anx écrits de Kant, 12mo, Jena, 1798.

Every concept is a general term which includes, on the one hand, a variety of attributes, and on the other, comprehends a variety of objects. The attributes included are called the

### CONCEPT-

contents, and the objects comprehended the extent of the concept. The greater the contents, the smaller the extent, and the smaller the contents, the greater the extent, of a concept.

A concept is clear, when its object, as a whole, can be distinguished from any other; it is distinct, when its several constituent parts can be distinguished from each other. The merit of first pointing out these characteristics of the logical perfection of thought is ascribed to Leibnitz. See Meditationes de Cognitione. Veritate et Ideis.

"Conception consists in a conscious act of the understanding, bringing any given object or impression into the same class with any number of other objects or impressions, by means of some character or characters common to them all. Concipinus, id est, capinus hoc cum illo—we take hold of both at once, we comprehend a thing, when we have learned to comprise it in a known class."—Coleridge, Church and State, Prelim. Rem. p. 4.

"Conception is the forming or bringing an image or idea into the mind by an effort of the will. It is distinguished from sensation and perception, produced by an object present to the senses; and from imagination, which is the joining together of ideas in new ways."—Taylor, Elements of Thought.

According to Mr. Stewart (Elements, vol. i. ch. 3), conception is "that faculty, the business of which is to present us with an exact transcript of what we have felt or perceived," or that faculty, whose province it is "to enable us to form a notion of our past sensations or of the objects of sense which we have formerly perceived." But what Mr. Stewart would thus assign to the faculty of conception belongs to imagination in its reproductive function. Hence Sir Will, Hamilton has said (Discussions, p. 276) "Mr Stewart has bestowed on the reproductive imagination the term conception; happily, we do not think; as, both in grammatical propriety and by the older and correcter usage of philosophers, this term (or rather the product of this operation, concept) is convertible with general notion, or more correctly, notion simply, and in this sense is admirably rendered by the begriff (which is, grasped up) of the Germans."

According to Kant, cognition by conception (begriff) is a

# CONCEPTION-

mode of cognizing an object, when I have not the same immediately before me. If I see a tree before me, its immediate representation strikes upon the senses, and I have an intuition of it; but if I represent to myself the tree by means of certain characteristics, which I seek for in the intuition of it, as, for example, the trunk, branches, and leaves, these characteristics are termed signs, and the complex of them is termed the content of the conception, and affords a mediate representation of the true. The difference between pure and empirical conceptions does not concern the origin of either in time, or the mode whereby we come to the consciousness thereof, but the origin of the same, from the source and content. Hence an empirical conception is that which does not only arise by occasion of experience, but to which experience also furnishes the matter. A pure conception is that with which no sensation is mixed up. The conception of cause is a pure conception of this kind, since I have no sensible object which I would term Cause.

Haywood, Crit. of Pure Reason, p. 594; Baynes, Essay on Analyt. of Log. Forms, pp. 5, 6; Meiklejohn's Trans. of Kant's Critique of Pure Reason, p. 45.

to conceive is an act more purely intellectual than imagining, proceeding from a faculty superior to those of sense and fancy, or imagination, which are limited to corporeal things, and those determined, as all particulars must be, to this or that place, time, manner, &c." Oldfield, Essay on Reason p. 11.

"It is one thing to *imagine* and another thing to *conceive*. For do we *conceive* anything more clearly than our thought when we think? And yet it is impossible to *imagine* a thought, or to paint any image of it in the brain."—Port Roy. Log., part i. ch. 1.

"The distinction between conception and imagination is real, though it be too often overlooked and the words taken to be synonymous. I can conceive a thing that is impossible, but I cannot distinctly imagine a thing that is impossible. I can conceive a proposition or a demonstration, but I cannot imagine either. I can conceive understanding and will, virtue and vice, and other attributes of mind, but I cannot imagine

## CONCEPTION and IMAGINATION—

them. In like manner, I can distinctly conceive universals, but I cannot imagine them."—Reid, Intell. Pow., essay iv.

Imagination has to do only with objects of sense, conception with objects of thought. The things which we imagine are represented to the mind as individuals, as some particular man, or some particular horse. The things of which we conceive are such as may be denoted by general terms, as man, horse. See Chretien, Essay on Logical Meth., p. 137; Coleridge, Notes on English Divines, 12mo, 1853, i. 27; Stoddart, "Univ. Grammar," in Ency. Metropol.; Whewell, Pref. to Philos. of Inductive Sciences.

CONCEPTUALISM is a doctriue in some sense intermediate between realism and nominalism,—q. v. Have genera and species a real independent existence? The Realist answers that they exist independently; that besides individual objects and the general notion from them in the mind. there exist certain ideas the pattern after which the single objects are fashioned; and that the general notion in our mind is the counterpart of the idea without it. The Nominalist says that nothing exists but things, and names of things; and that universals are mere names, flatus venti. The Conceptualists assign to universals an existence which may be called logical or psychological, that is, independent of single objects, but dependent upon the mind of the thinking subject. in which they are as notions or conceptions. - Thomson, Outline of Laws of Thought, 2d ed., p. 112; [3d ed. p. 126.]

Dr. Brown, while his views approach those of the Conceptualists, would prefer to call himself a Relationalist.—See Physiol. of Hum. Mind, p. 295.

Cousin, Introd. Aux Ouvrages Inedits d'Abelard, 4to, Par., 1836, p. 181; Reid, Intell. Pow., essay v. ch. 6, with Sir W. Hamilton's note, p. 412.

conclusion.—That proposition which is inferred from the premises of an argument is called the *conclusion*.—Whately, Log., bk. ii. ch. 3, sec. 1. When something is simply affirmed to be true, it is called a proposition; after it has been found to be true, by several reasons or arguments, it is called a conclusion. "Sloth and prodigality will bring a man to want," this is a proposition; after all the arguments have

## CONCLUSION—

been mentioned which prove this to be true, we say, "therefore sloth and prodigality will bring a man to want;" this is now the conclusion.—Taylor, Elements of Thought.

CONCRETE (concresco, to grow together), is opposed to abstract.

A concrete notion is the notion of an object as it exists in nature, invested with all its qualities. An abstract notion, on the contrary, is the notion of some quality or attribute separated from the object to which it belongs, and deprived of all the specialities with which experience invests it; or it may be the notion of a substance stripped of all its qualities. In this way concrete comes to be synonymous with particular, and abstract with general.

The names of classes are abstract, those of individuals concrete; and from concrete adjectives are made abstract substantives.-V. Abstract, Term.

# CONDIGNITY.—V. MERIT.

CONDITION (con and dare).—[That which is attendant on the cause, or co-operates with it, for the accomplishment of the result; or, that which limits the cause in its operation .- Ed.] (Conditio fere sumitur pro qualitate qua quid condi, id est fieri. -Vossius. Or it may be from condo, to give along with, i.e.,

something given or going along with a cause)...

A condition is that which is pre-requisite in order that something may be, and especially in order that a cause may operate, as opening the eyes to see; or applying one's strength in conjunction with another, when two men are required to lift or carry a weight, it being a condition of their doing so that their strength be exerted at the same time. A condition is prior to the production of an effect; It is fire that burns; but, but it does not produce it. before it burns, it is a condition that there be an approximation of the fire to the fuel, or the matter that is burned.

"By a condition," says Mr. Karslake (Aids to Log., vol. ii. p. 43), "is meant something more negative, whereas a cause is regarded as something more positive. We seem to think of a condition rather as that whose absence would have prevented a thing from taking place; of a cause, rather as that whose presence produced it."

" Condition means that on which something else is contingent, or (more definitely) which being given something

#### CONDITION—

else, exists or takes place. I promise to do something on condition that you do something else; that is, if you do this, I will do that; if not, I will do as I please."-J. S. Mill, On Hamilton's Phil., p. 50.

Condition and Conditioned (Bedingung and Bedingt) are correlative conceptions. The condition is the ground which must be presupposed; and what presupposes a condition is

the conditioned, conditionate, or conditional.

["The conditioned" is the expression employed to describe the relative and limited, in contrast with the expression, "unconditioned," which is applied to the absolute and infinite. -- Hamilton's Discussions; Mansel's Limits of Relig. Thought. —Ed.]

CONDITIONED (Law of the) .-- "I lay it down as a law which, though not generalised by philosophers, can be easily proved to be true by its application to the phenomena;—that all that is conceivable in thought, lies between two extremes, which as contradictory of each other, cannot both be true, but of which, as mutual contradictories, one must."--Hamilton's Lect., vol. ii. pp. 368, 369. "From this impotence of intellect, we are unable to think aught as absolute."-Reid's Works, 911.

Now the law of mind, that the conceivable is in every relation bounded by the inconceivable, I call the Law of the Conditioned.—Ibid., p. 373.

CONDITIONAL.—V. Proposition, Syllogism.

- CONGRUITY (from congruo, to come together as cranes do, who feed and fly in companies), means the fitness or agreement of one thing to another. Congruity to the relations of the agent is given by some philosophers as the characteristic of all right actions. Thus there is a congruity or fitness in a creature worshipping his Creator, in a son honouring his father. In this use of the word it belongs to the theory which places virtue in the fitness of things.—V. MERIT.
- CONNOTATIVE, A, or Attributive term, is one which, when applied to some object, is such as to imply in its signification some attribute belonging to that object. It connotes, i.e., notes along with the object (or implies), something considered as inherent therein; as "The capital of France,"

## CONNOTATIVE-

"The founder of Rome." The founding of Rome is, by that appellation, attributed to the person to whom it is applied.

A term which merely denotes an object, without implying any attribute of that object, is called absolute or nonconnotative; as Paris, Romulus. The latter terms denote respectively the same objects as the former, but do not, like them, connote (imply in their signification) any attribute of those individuals.—Whately, Log. bk. ii. ch. 5, sec. 1; Mill,

Log., bk. i. ch. 2, sec. 5.

CONSANGUINITY (con sanguis, of the same blood), is defined to be, vinculum personarum ab eodem stipite descendentium, the relation of persons descended from the same stock or common ancestor. It is either lineal or collateral. Lineal consanguinity is that which subsists between persons of whom one is descended in a direct line from the other; as son, grandson, great grandson, &c. Collateral relations agree with the lineal in this, that they descend from the same stock or ancestor; but differ in this, that they do not descend the one from the other. John has two sons, who have each a numerous issue; both these issues are lineally descended from John, or their common ancestor; and they are collateral kinsmen to each other, because all descended from this common ancestor, and all have a portion of his blood in their veins, which denominates them consanguincous .- V. AFFINITY.

CONSCIENCE (conscientia, συνείδησις, Gewissen, joint or double knowledge), means [that power by which we have] knowledge of conduct in reference to the law of right and wrong. [Strictly the name is applicable to the power by which we know moral law. Popularly the name is given indiscriminately to the knowing power, and to the dispositions and sentiments concerned with morals.—Ed.]

"Conscience is the reason, employed about questions of right and wrong, and accompanied with the sentiments of approbation and condemnation, which, by the nature of man, cling inextricably to his apprehension of right and wrong."—

Whewell, Syst. Mor., lect. vi.

According to some, conscience takes cognizance merely of our own conduct. Thus Bishop Butler has said (sermon i., On Hum. Nature): "The principle in man by which he

## CONSCIENCE-

approves or disapproves of his heart, temper, and actions, is conscience—for this is the strict sense of the word, though it is sometimes used so as to take in more."

Locke defined conscience to be "our own judgment of the

rectitude and privity of our own actions."

Dr. Rush (Inquiry into the Influence of Physical Causes upon the Moral Faculty, p. 3), has said: The moral faculty exercises itself upon the actions of others. It approves, even in books, of the virtues of a Trajan, and disapproves of the vices of a Marius, while conscience confines its operations to our own actions.

"The word 'conscience' does not immediately denote any moral faculty by which we approve or disapprove. Conscience supposes, indeed, the existence of some such faculty, and properly signifies our consciousness of having acted agreeably or contrary to its directions."—Smith, Theory of Mor. Sent., part. vii. sec. 3.

"Conscience coincides exactly with the moral faculty, with this difference only, that the former refers to our own conduct alone, whereas the latter is meant to express also the power by which we approve or disapprove of the conduct of others."—Stewart, Act. Pow., part i. ch. 2. See also Payne, Elements of Mor. Science, 1845, p. 283.

By these writers conscience is represented as being the moral faculty judging in reference to our own conduct, and giving us a consciousness of self-approbation or of self-condemnation.

By a further limitation of the term, conscience has been regarded by some as merely retrospective in its exercise; and by a still further limitation as only, or chiefly, punitive in its exercise, and implying the consciousness of our having acted wrong.

But of late years, and by the best writers, the term conscience, and the phrases moral faculty, moral judgment, faculty of moral perception, moral sense, susceptibility of moral emotion, have all been applied to that faculty, or combination of faculties, by which we have ideas of right and wrong in reference to actions, and correspondent feelings of approbation and disapprobation. This faculty, or combination of faculties, is called into exercise not merely in reference to our own

## CONSCIENCE-

conduct, but also in reference to the conduct of others. It is not only reflective but prospective in its operations. It is antecedent as well as subsequent to action in its exercise; and is occupied de faciendo as well as de facto.—See Reid, Act.

Pow., essay iii. part iii. ch. 8.

[" The internal sanction of duty, whatever our standard of duty may be, is one and the same-a feeling in our own mind, a pain more or less intense, attendant on violation of duty. . . . . This feeling, when disinterested, and connecting itself with the pure idea of duty, and not with some particular form of it, or with any of the merely accessary circumstances, is the essence of Conscience."—J. S. Mill's Utilitarianism, p. 41.

"I entirely dissent from Dugald Stewart, and the great majority of writers on the Theory of Morals, who represent Conscience as a primitive and independent faculty of the mind, which would be developed in us although we never had any experience of external authority. On the contrary, I maintain that conscience is an imitation within ourselves of the government without us."—Bain, Emotions and Will, 3d ed. p. 285.

"I find that I undoubtedly seem to perceive, as clearly and certainly as I see any axiom in arithmetic or geometry, that it is 'right' and 'reasonable,' and the 'dictate of reason,' and 'my duty' to treat every man as I should think that I myself ought to be treated in precisely similar circumstances."

-Sidgwick, Methods of Ethics, 470.]

With reference to their views as to the nature of conscience and the constitution of the moral faculty, modern philosophers may be arranged in two great schools or sects. The difference between them rests on the prominence and precedence which they assign to reason and to feeling in the exercise of the moral faculty; and their respective theories may be distinctly designated the intellectual theory and the sentimental theory. See Hume's Inquiry concerning the Principles of Morals, sec. 5.

CONSCIOUSNESS (conscientia [Bewusztseyn] joint knowledge, a knowledge of one thing in connection or relation with another). [The knowledge which the mind has of itself, and of the facts of its own experience.-Ed.]

Sir William Hamilton has remarked (Discussions, p. 110, note) that "the Greek has no word for consciousness," and that "Tertullian is the only ancient who uses the word conscientia

in a psychological sense, corresponding with our consciousness."

-Reid's Works, p. 775.

The meaning of a word is sometimes best attained by means of the word opposed to it. *Unconsciousness*, that is, the want or absence of *consciousness*, denotes the suspension of all our faculties. *Consciousness*, then, is the state in which we are when all or any of our faculties are in exercise. It is the accompaniment of every mental operation.

The scholastic definition was, perceptio qua mens de presenti

suo statu admonetur.

"Consciousness is the necessary knowledge which the mind has of its own operations. In knowing, it knows that it knows. In experiencing emotions and passions, it knows that it experiences them. In willing, or exercising acts of casuality, it knows that it wills or exercises such acts. This is the common, universal, and spontaneous consciousness."

... "By consciousness more nicely and accurately defined, we mean the power and act of self-recognition: not if you please, the mind knowing its knowledges, emotions, and volitions; but the mind knowing itself in these."—Tappan, Doctrine of the Will by an Appeal to Consciousness, ch. 2, sec. 1.

Mr. Locke has said (Essay on Hum. Understand., bk. ii. ch. 1), "It is altogether as intelligible to say that a body is extended without parts, as that anything thinks without being conscious of it, or perceiving that it does so. They who talk in this way, may, with as much reason, say that a man is always hungry, but that he does not always feel it; whereas hunger consists in that very sensation, as thinking consists

in being conscious that one thinks!"

"We not only feel, but we know that we feel; we not only act, but we know that we act; we not only think, but we know that we think; to think, without knowing that we think, is as if we should not think; and the peculiar quality, the fundamental attribute of thought, is to have a consciousness of itself. Consciousness is this interior light which illuminates everything that takes place in the soul; consciousness is the accompaniment of all our faculties; and is, so to speak, their echo."—Cousin, Hist. of Mod. Philosoph., vol. i. p. 274-75.

On consciousness as the necessary form of thought, see lect. v. of the same volume.

That consciousness is not a particular faculty of the mind, but the fundamental form of all the modes of our thinking activity, and not a special mode of that activity, is strenuously maintained by Amadee Jacques, in the Manuel de Philosophic, Partie Psychologique; and also by two American writers, Mr. Bowen in his Critical Essays, p. 131, and Mr. Tappan. This view is in accordance with the saying of Aristotle, our gotto αἴσθησις αἰσθήσεως—there is not a feeling of a feeling; and that of the schoolmen-" Non sentimus, nisi sentiamus nos sentirc-non intelligimus, nisi intelligamus nos intelligere." "No man," said Dr. Reid, "can perceive an object without being conscious that he perceives it. No man can think, without being conscious that he thinks." And as on the one hand we cannot think or feel without being conscious, so on the other hand we cannot be conscious without thinking or feeling. This would be, if possible, to be conscious of nothing, to have a consciousness which was no consciousness, or conseiousness without an object. "Annihilate the object of any mental operation and you annihilate the operation; annihilate the eonseiousness of the object, and you annihilate the operation."

This view of consciousness, as the common condition under which all our faculties are brought into operation, or of considering these faculties and their operations as so many modifications of consciousness, has of late been generally adopted; so much so, that psychology, or the science of mind, has been denominated an inquiry into the facts of consciousness. All that we can truly learn of mind must be learned by attending to the various ways in which it becomes conscious. None of the phenomena of consciousness can be called in question. They may be more or less clear—more or less complete; but they either are or are not.

In the Dict. des Sciences Philosoph., art. "Conscience," it is maintained that consciousness is a separate faculty, having self, or the ego, for its object.

Instead of regarding consciousness as the common condition or accompaniment of every mental operation, Royer Collard and Adolphe Garnier among the French, and Reid and Stewart among the Scotch philosophers, have been represented as holding the opinion that consciousness is a separate

faculty, having for its objects the operations of our other faculties. "Consciousness," says Dr. Reid (Intell. Pow., essay i. ch. 1; see also essay vi. ch. 5), "is a word used by philosophers to signify that immediate knowledge which we have of our present thoughts and purposes, and in general, of all the present operations of our minds. Whence we may observe that consciousness is only of things present. To apply consciousness to things past, which sometimes is done, in popular discourse, is to confound consciousness with memory; and all such confusion of words ought to be avoided in philosophical discourse. It is likewise to be observed that consciousness is only of things in the mind, and not of external things. It is improper to say, 'I am conscious of the table which is before me.' I perceive it, I see it, but do not say I am conscious of it. As that consciousness by which we have a knowledge of the operations of our own minds, is a different power from that by which we perceive external objects; and as these different powers have different names in our language, and, I believe, in all languages, a philosopher ought carefully to preserve this distinction, and never confound things so different in their nature." In this passage Dr. Reid speaks of consciousness properly so called as that consciousness which is distinct from the consciousness by which we perceive external objects-as if perception was another kind or mode of consciousness. Whether all his language be quite consistent with the opinion that all our faculties are just so many different modes of our becoming conscious, may be doubted. But there is no doubt that by consciousness he meant especially attention to the operations of our own minds, or reflection; while by observation he meant attention to external things. This language has been interpreted as favourable to the opinion that consciousness is a separate faculty. Yet he has not distinctly separated it from reflection except by saying that consciousness accompanies all the operations of mind. Now reflection does not. It is a voluntary act—an energetic attention to the facts of consciousness. But consciousness may be either spontaneous or reflective.

"This word denotes the immediate knowledge which the mind has of its sensations and thoughts, and in general, of all its present operations."—Stewart, Outlines Mor. Phil., parti. sec. 1.

Mr. Stewart, in his Outlines, has enumerated consciousness as one of our intellectual powers, co-ordinate with perception, memory, judgment, &c. But consciousness is not confined to the operation of the intellectual powers. It accompanies the development of the feelings and the determinations of the will. And the opinion that consciousness is a separate faculty, is not only founded on a false analysis, but is an opinion, which if prosecuted to its results would overturn the doctrine of immediate knowledge in perception-a doctrine which Stewart and Reid upheld as the true and only barrier against the scepticism of Hume. "Once admit that, after I have perceived an object, I need another power termed consciousness, by which I become cognizant of the perception, and by the medium of which the knowledge involved in perception is made clear to the thinking self, and the plea of common sense against scepticism is cut off. . . . . I am conscious of self and of notself; my knowledge of both in the act of perception is equally direct and immediate. On the other hand, to make consciousness a peculiar faculty, by which we are simply cognizant of our own mental operations, is virtually to deny the immediacy of our knowledge of an external world."-Morell, Hist. of Spec. Philosoph., vol. ii. р. 13.

"We may give consciousness a separate name and place, without meaning to degrade it to the level of the other faculties. In some respects it is superior to them all, having in it more of the essence of the soul, and being exercised whenever the soul is intelligently exercised."—M'Cosh,

Method of Div. Govern., p. 533, 5th ed.

See Fearn, Essay on Consciousness; Garnier, Traité des Facultés, pref. p. 24. Hamilton identifies consciousness with immediate knowledge. He says consciousness and immediate knowledge "are terms universally convertible; and if there be an immediate knowledge of things external, there is consequently the consciousness of an outer world."—Lects. i. 221.

[The reliability of consciousness has been disputed. It has been said that "the madman's delusion is of itself sufficient to excite profound distrust, not only in the objective truth, but in the subjective worth of the testimony of an individual's

self-consciousness."—Maudsley, Physiology and Pathology of

Mind, p. 11.—Ed.

consent.—[Con, with, and sentio, I feel, or think. Voluntarily expressed agreement with another in thought or feeling, but more commonly in action.—Ed.]

Assent is the consequence of a conviction of the understanding. Consent arises from the state of the disposition and the will. The one accepts what is true; the other embraces it as

true and good.—V. Assent.

CONSENT (Universal, Argument from).—V. AUTHORITY.

Reid applies this argument to establish first principles.—
Intell. Pow., essay i. ch. 2. He uses it against the views

of Berkeley and Hume.—Essay ii. ch. 19.

Cicero (De Officiis, lib. i. cap. 41) says, Major enim pars co fere deferri solet quo a natura deducitur. It is used to prove the existence of the gods. De quo autem omnium natura consentit, id verum esse necesse est. Esse igitur deos, confitendum est. (De Nat. Deorum, lib. i. cap. 17), Cotta argues against it, cap. 23. The argument is also used (De Nat. Deor., lib. ii. 2; and Tuscul. Quast., lib. i. 13), where we read, Omni autem in re, consensio omnium gentium lex natura putanda est.

Bacon is against this argument in the preface to his Instau-

ratio Magna, in aphorism 77, and in Cogitata et Visa.

"These things are to be regarded as first truths, the credit of which is not derived from other truths, but is inherent in themselves. As for probable truths, they are such as are admitted by all men, or by the generality of men, or by wise men; and among these last, either by all the wise, or by the generality of the wise, or by such of the wise as are of the highest authority."—Aristotle, Topic., i. 1.

Multum dare solemus præsumptioni omnium hominum. Apud nos veritatis argumentum est aliquid omnibus videri.—Seneca,

Epist., cvii., cxvii.

consequent.—Consequence and Consequent (con sequent, to follow from or with). A consequent, viewed by itself, is a proposition the truth or falsity of which is ascertained by fact. A consequence is a conclusion or inference which is true or false, according as it follows or does not follow from the premises.

CONSILIENCE of INDUCTIONS takes place when an induction obtained from one class of facts coincides with an induction

CONSILIENCE of INDUCTIONS.

obtained from a different class. This consilience is the test of the truth of the theory in which it occurs.-Whewell, Philosoph. Induct. Sciences, aph. 14.

Paley's Hora Paulina, which consists of gathering together undesigned coincidences, is an example of the consilience of

inductions.

CONSTITUTIVE (German, eonstitutiv), means objectively determining, or legislating. That which is constitutive is opposed to that which is regulative. [This is Kant's distinction. Constitutive (constitutiv) is applied to knowledge verified in experience, knowledge whose object is found, in the concrete. Regulative (regulative) is applied to forms of knowledge which are simply regulative of the mind (in its exercise of the sensory, Simulichkeit, or of the understanding, Verstand, or of the reason, Vernunft) while acquiring and asserting its knowledge. The ground of the distinction is well explained in the preface to the second edition of the Critique of Pure Reason, Meiklejohn's Trans. p. xxiv.; Werke, Rosencranz, ii. suppl. ii. 664. The distinction itself is given in Critique, Trans. p. 67 (Transcendental Analytic) Werke, Rosencranz, ii. suppl. xii. 722; and it is applied to the ideas of the Reason.—Trans. 407, Werke, Rosen., ii. 515. In this relation it is needful to keep in mind Kant's distinction between to know (erkennen) and to think (denken). According to this, we can think any thing which is not self-contradictory, but we can know only that whose possibility can be proved either by experience or by reason.—Trans. Pref. xxiii. Werke, Rosen. ii. 676, note.—Ed.]

CONTEMPLATION (contemplor), means originally to gaze on a shire of the heavens marked out by the augur.-Taylor, Synonyms. "Keeping the idea which is brought into it (the mind) for some time actually in view, which is called contemplation."-Locke, Essay on Hum. Understand., bk. ii. ch.

10.

When an object of sense or thought has attracted our admiration or love we dwell upon it; not so much to know it better, as to enjoy it more and longer. This is contemplation, and differs from reflection, which seeks knowledge by active use of intellect.

CONTINENCE (contineo, to restrain), is the virtue which con-

## CONTINENCE-

sists in governing the appetite of sex. It is most usually applied to men, as chastity is to women. Chastity may be the result of natural disposition or temperament—continence carries with it the idea of struggle and victory.

CONTINGENT (contingo, to touch).—[Depending for occurrence

upon events which we cannot forecast.—Ed.]

"When any event takes place which seems to us to have no cause, why it should happen in one way rather than another, it is called a *contingent* event; as, for example, the falling of a leaf on a *certain spot*, or the turning up of any particular number when the dice are thrown."—Taylor, *Elements of Thought*.

"Contingent is that which does not happen constantly and regularly. Of this kind ancient philosophy has distinguished three different opinions; for either the event happens more frequently one way than another, and then it is said to be  $\xi \pi i$ τὸ πολύ; of this kind are the regular productions of nature, and the ordinary actions of men. Or it happens more rarely, such as the birth of monsters, or other extraordinary productions of nature, and many accidents that happen to man. Or, lastly, it is betwixt the two, and happens as often the one way as the other; or, as they express it in Greek, ὁπότερα τύχη. Of this kind are some things in nature, such as the birth of a male or female child; a good or bad day in some climates of the earth; and many things among men, such as good or bad luck at play. All these last-mentioned events are in reality as necessary as the falling of heavy bodies, &c. But as they do not happen constantly and uniformly, and as we cannot account for their happening sometimes one way and sometimes another, we say they are contingent."-Monboddo, Ancient Metaphys., vol. i. p. 295.

The contingent is known empirically—the necessary by the reason. There are but two modes of being, the necessary and the contingent. But the contingent has degrees: 1. Simple facts which appear and disappear, or, in the language of the Schools, accidents. 2. Qualities or properties inherent in a substance, which constitute its specific character. 3. The substance itself considered as a particular and finite existence.

A thing may be contingent in three ways:-

1. Aqualiter, when the thing or its opposite may equally be, from the determination of a free will.

## CONTINGENT-

2. Ut plurimum, as when a man is born with five digits,

though sometimes with more or less.

3. Raro, as when it happens seldom; by a necessary agent, as when a tile falls on a man's head; or by a free agent, as when a man cleaving wood wounds the bystander.-See Chauvin, Lexicon Philosoph.

An event, the opposite of which is possible, is contingent. An event, the opposite of which is impossible, is necessary. An event is impossible when the opposite of it is necessary. An event is possible when the opposite of it is contingent.

CONTINUITY (Law of)-[affirms persistence of being, on the ground of indestructibility of nature. Applicable either to matter or to force. Ed.] "The supposition of bodies perfectly hard, having been shown to be inconsistent with two of the leading doctrines of Leibnitz, that of the constant maintenance of the same quantity of force in the universe, and that of the proportionality of forces to the squares of the velocities-he found himself reduced to the necessity of maintaining that all changes are produced by insensible gradations, so as to render it impossible for a body to have its state changed from motion to rest, or from rest to motion, without passing through all the intermediate states of velocity. From this assumption he argued with much ingenuity, that the existence of atoms, or of perfectly hard bodies, is impossible; because, if two of them should meet with equal and opposite motions, they would necessarily stop at once, in violation of the law of eontinuity."—Stewart, Dissert., part ii. p. 275.

"I speak," said John Bernouilli (Discourse on Motion, 1727), "of that immovable and perpetual order established since the creation of the universe, which may be called the law of continuity, in virtue of which everything that is done, is done by degrees infinitely small. It seems to be the dictate of good sense that no change is made per saltum; natura non operatur per saltum; and nothing can pass from one extreme to another without passing through all the intermediate degrees."

The law of continuity, though originally applied to continuity of motion, was extended by Charles Bonnet to continuity of being. He held that all the various beings which compose the universe, from a scale descending downwards without any chasm or saltus, from the Deity to the simplest forms of unor-

## CONTINUITY-

ganized matter. A similar view had been held by Locke and others (Spectator, No. 519). The researches of Cuvier have shown that it can only be held with limitations and exceptions, even when confined to the comparative anatomy of animals. [For more recent usage in physical science, see Balfour Stewart's Conservation of Energy, and Tait's Recent Advances of Physical Science.—Ed.]

contract (contraho, to draw together).—A contract is a voluntary agreement or pact in which one party comes under obligation to do one thing, and the other party to do some other thing. Paley calls it a mutual promise. Contracts originate in the insufficiency of man to supply all his needs. One wants what another has abundance of and to spare; while the other may want something which his neighbour has.

The framing and fulfilling of contracts have in all countries been made the object of positive law. Viewed ethically, the obligation to fulfil them is the same with that to fulfil a promise.

The consideration of contracts, and of the various kinds and conditions of them, belongs to Jurisprudence.

While all contracts are pacts, all pacts are not contracts. In the Roman law, a distinction was taken between pacts or agreements entered into without any cause or consideration antecedent, present or future, and pacts which were entered into for a cause or consideration, that is, containing a συνάλλαγμα, or bargain, or as it may be popularly expressed, a quid pro quo-in which one party came under obligation to give or do something, on account of something being done or given by the other party. Agreements of the latter kind were properly contracts, while those of the former were called bare pacts. A pactum nudum, or bare pact, was so called because it was not clothed with the circumstances of mutual advantage, and was not a valid agreement in the eye of the Roman law. Nuda pactio obligationem non facit. It is the same in the English law, in which a contract is defined: "An agreement of two or more persons, upon sufficient consideration, to do or not to do a particular thing,"-and the consideration is necessary to the validity of the contract.

CONTRADICTION, Principle of (contradico, to speak against; contradictio, ἀντίφασις).—It is usually expressed thus: A

## CONTRADICTION—

thing cannot be and not be at the same time, or a thing must either be or not be, or the same attribute cannot at the same time be affirmed and denied of the same subject.—Pierron and Zevort, Introd. à la Metaphys. d'Aristote, 2 tom., Paris, 1840.—V. IDENTITY. Aristotle laid down this principle as the basis of all Logic and of all Metaphysic.—Aristot., Metaphys., lib. iii. cap. 3; lib. ix. cap. 7; lib. x. cap. 5.

Leibnitz thought it insufficient as the basis of all truth and reasoning, and added the principle of the sufficient reason—q. v.

Kant thought this principle good only for those judgments of which the attribute is the consequence of the subject, or, as he called them, analytic judgments; as when we say, all body has extension. The idea of extension being enclosed in that of body, it is a sufficient warrant of the truth of such a judgment, that it implies no contradiction. But in synthetic judgments, we rest either on a belief of the reason or the testimony of experience, according as they are à priori or à posteriori.

As the law of contradiction enjoins the absence of contradiction as the indispensable condition of thought, it ought to be called the law of non-contradiction.—Sir W. Hamilton, Logic

Lect.

"The law of contradiction vindicates itself. It cannot be denied without being assented to."—Ferrier, Inst. of Metaphys., p. 21. The principle of contradiction is the same with the Dictum deomni et nullo—q.v. See Poste, Poster. Analyt., App. A. CONTRARIES.—Aristotle defines contrary, "that which in the same genus differs most;" as in colour, white and black; in sensation pleasure and pain; in morals, good and evil. Con-

same genus differs most;" as in colour, white and black; in sensation, pleasure and pain; in morals, good and evil. Contraries never co-exist, but they may succeed in the same subject. They are of two kinds, one admitting a middle term, participating at once in the nature of the things opposed. Thus, between absolute being and nonentity, there may be contingent being. In others no middle term is possible. There are contraries of which the one belongs necessarily to a subject, or is a simple privation, as health and sickness; light and darkness; sight and blindness. Contraries which admit of no middle term are contradictories; and form, when united, a contradiction. On this rests all logic. Aristotle wished to

#### CONTRARIES-

make a virtue a middle term, between two extremes.—Diet. des Sciences Philosoph.

Aristotle (De Anima, lib. iii. cap. 3), says—"There seems to be one and the same error, and one and the same science, with respect to things contrary." This, by Themistius, in his Paraphrase, is thus illustrated:—"Of things contrary there is one science and one ignorance. For thus, he who knows good to be something beneficial, knows evil at the same time to be something pernicious; and he who is deceived with respect to one of these, is deceived also with respect to the other."

"There is an essential difference between opposite and contrary. Opposite powers are always of the same kind, and tend to union either by equipoise, or by a common product. Thus the + and the - poles of the magnet, thus positive and negative electricity, are opposites. Sweet and sour are opposites; sweet and bitter are contrarics. The feminine character is opposed to the masculine; but the effeminate is its contrary."—Coleridge, Church and State, note, p. 18.

Contrary and Contradictory.—" Pleasure and pain are opposed to each other as *contraries*, not as *contradictorics*, that is, the affirmation of the one implies the negation of the other, but the negation of the one does not infer the affirmation of the other; for there may be a third or intermediate state, which is neither one of pleasure nor one of pain, but one of indifference.—Sir W. Hamilton, *Lect.* ii. p. 436.

CONVERSION, in Logic, is the transposition of the subject of a proposition into the place of the predicate, and of the predicate into the place of the subject. The proposition to be converted is called the convertend or exposita, and that into which it is converted the converse. Logical conversion is illative, that is, the truth of the convertend necessitates the truth of the converse. It can only take place when no term is distributed in the converse which was undistributed in the convertend. It is of three kinds, viz., simple conversion, conversion per accidens, and conversion by negation or contraposition.—Whately, Log., bk. ii. ch. 2, sec. 4.

**COPULA** (The) is that part of a proposition which indicates that the predicate is affirmed or denied of the subject. This is sometimes done by *inflection*; as when we say, Fire burns;

## COPULA-

the change from burn to burns showing that we mean to affirm the predicate burn of the subject fire. But this function is more commonly fulfilled by the word is, when an affirmation is intended—is not, when a negation; or by some other part of the verb to be. Sometimes this verb is both copula and predicate, e.g., "One of Jacob's sons is not." But the copula, merely as such, does not imply real existence, e.g., "A faultless man is a being feigned by the Stoics."—Whately, Log., bk. ii. ch. 1, sec. 3; Mill, Log., bk. i. ch. 4, sec. 1.

COROLLARY.—"We use the word Corollary to denote a consequence or a conclusion flowing from something previously demonstrated, but the word in its earlier use signified a surplus, or addition, and is so used by Shakespeare in *The Tempest*," act iv. scene 1. Prospero says—

"Well,— Now come, my Ariel! bring a corollary, Rather than want a spirit."

The word is handed down to us from the Romans, and was used by them in their dramatic entertainments to signify a reward given to the players, over and above their just hire, and was derived from the word *corolla*, a little crown or garland, such being the reward usually given."—Knapp, *Roots and Ramifications*.

## CORRELATE.-V. RELATION.

"It was a most ancient, and, in a manner, universally received tradition among the Pagans, that the cosmogonia, or generation of the world, took its first beginning from a chaos (the divine cosmogonists agreeing therein with the atheistic ones): this tradition having been delivered down from Orphens and Linns (among the Greeks) by Hesiod and Homer, and others."—Cudworth, Intell. Syst., p. 248.

The different theories as to the origin of the world may be

comprehended under three classes :-

1. Those which represent the world, in its present form, as having existed from eternity.—Aristotle.

2. Those which represent the *matter* but not the *form* of the world to be from eternity.—Leucippus, Democritus, Epicurus.

3. Those which assign both the matter and form of the world to the direct agency of a spiritual cause.

## COSMOGONY-

"Cosmogony treats of the birth, cosmography of the description, and cosmology of the theory of the world."—Taylor, Synonyms.

COSMOLOGY, Rational.—V. METAPHYSICS.

COURAGE.—V. FORTITUDE.

CRANIOLOGY. [Theory of the cranium as a key to mind.]—V. Phrenology.

creation is the act by which God produced out of nothing all things that now exist. Unless we deny altogether the existence of God, we must either believe in creation or accept one or other of the two hypotheses, which may be called theological dualism and pantheism. According to the former, there are two necessary and eternal beings, God and matter. According to the latter, all beings are but modes or manifestations of one eternal and necessary being. A belief in creation admits only the existence of one necessary and eternal being, who is at once substance and cause, intelligence and power, absolutely free and infinitely good. God and the universe are essentially distinct. God has self-consciousness, the universe has not and cannot have.—Dict. des Sciences Philosoph.

others tell us. Credulity is set down by Dr. Reid as an original principle implanted in us by the Supreme Being. And as the counterpart of this he reckons veracity or a propensity to speak truth and to use language so as to convey our real sentiments, to be also an original principle of human nature.—Reid, Inquiry, ch. 6, sec. 24; and also Act. Pow., essay iii. part i. ch. 2; Stewart, Act. Pow., vol. ii. p. 344; Priestly, Exam., p. 86; Brown, lect. lxxxiv.

CRITERION (κριτήριον, from the Greek verb κρίνω, to judge), denotes in general, all means proper to judge.—[More properly,—A test of certainty.] It has been distinguished into the criterion a quo, per quod, and secundum quod—or the being who judges, as man; the organ or faculty by which he judges, and the rule according to which he judges. Unless utter scepticism be maintained, man must be admitted capable of knowing what is true.

"With regard to the criterion (says Edw. Poste, M.A., Introd., p. 14, to trans. of Poster. Analyt. of Aristotle), or

#### CRITERION-

organ of truth among the ancient philosophers, some advocated a simple and others a mixed criterion. The advocates of the former were divided into Sensationalists or Rationalists, as they advocated sense or reason; the advocates of the latter advocated both sense and reason. Democritus and Leueippus were Sensationalists; Parmenides and the Pythagoreans were Rationalists; Plato and Aristotle belonged to the mixed sehool. Among those who advocated reason as a criterion, there was an important difference: some advocating the common reason, as Heraclitus and Anaxagoras; others, the seientifie reason, or the reason as cultivated and developed by education, as Parmenides, the Pythagoreans, Plato, and Aristotle. In the Republic (7, see. 9), Plato prescribes a training calculated to prepare the reason for the perception of the higher truths. Aristotle requires education for the moral reason. The older Greeks used the word measure, instead of criterion; and Protagoras has said, that man was the measure of all truth. This Aristotle interprets to mean that sense and reason are the organs of truth (Metaphys., x. 2; xi. 6), and he accepts the doctrine, if limited to these faculties in a healthy and perfect condition. These names, then, cannot properly be ranked among the common sense philosophers, where they are placed by Sir William Hamilton.

"When reason is said to be an organ of truth, we must include, besides the intuitive, the syllogistic faculty. This is the instrument of the mediate or indirect apprehension of truth, as the other of immediate. The examination of these instruments, in order to discover their capabilities and right use, is Logie. This appears to be the reason why Aristotle gave the title of Organon to his Logie. So Epicurus ealled his the Canon or Criterion." The controversy on the Criterion is to be found at length in Sextus Empirieus, Hypot., lib. ii.

cap. 5-7.

Criterion is now used chiefly to denote the character which distinguishes truth from falsity. In this sense it corresponds

with the ground of certitude.—V. CERTITUDE.

CRITIQUE (German, kritik), [used in Germany, as with us, to designate a criticism of any work, but specially employed by Kant as the name of a philosophy attained by critical diserimination of elements of knowledge gathered by experience, CRITIQUE-

from those which are given by the Reason itself, called by

him the Pure Reason.—Ed.]

by steady increase of evidence as it advances from step to step.—Ed.] "The proof of a Divine agency is not a conclusion which lies at the end of a chain of reasoning, of which chain each instance of contrivance is only a link, and of which, if one link fail, the whole falls; but it is an argument separately supplied by every separate example. An error in stating an example affects only that example. The argument is cumulative in the fullest sense of that term. The eye proves it without the ear, the ear without the eye."—Paley, Nat. Theol., ch. 6.

ing, or action. That which is familiar in thought, feeling, or action. That which is common in the practice either of an individual or of society. It is to be carefully distinguished from Habit which is an acquired facility.—Ed.] "Let custom from the very childhood, have joined figure and shape to the idea of God, and what absurdities will that mind be liable to about the Deity."—Locke, Essay on Hum. Understand., bk. i ch. 33, 17; and bk. i. ch. 4, 16.

Custom is the queen of the world.

"Such precedents are numberless; we draw
Our right from custom; custom is a law

As high as heaven, as wide as seas or land."

Lansdown, Beauty and Law.

A custom is not necessarily a usage. A custom is merely that which is often repeated; a usage must be often repeated and of long standing. Hence we may speak of a "new custom," but not of a "new usage." Custom had probably the same origin as "accost," to come near, and thence to be habitual. The root is the Latin costa, the side or rib.—See Kames, Elements of Criticism, ch. 14; Sir G. C. Lewis, On Politics, ch. 20, sec. 9.

"An aggregate of habits, either successive or cotemporaneous in different individuals, is denoted by the words custom, usage, or practice.\*—See Smith's Moral Sents., part v. ch. 1.

<sup>\*</sup> A similar distinction between mos and consuetudo is made by Macrobius, Saturn, iii. 8, eominenting on Virgil, Æneėd, 6, 601. He quotes Varro as stating that mos is the unit, and consuetudo the resulting aggregate.

CYNIC.—After the death of Socrates, some of his disciples, under Antisthenes, were accustomed to meet in the Cynosarges, one of the gymnasia of Athens,—and hence they were called Cynics. According to others, the designation comes from χύων, a dog, because like the dog they were destitute of all modesty. Antisthenes, Diogenes, and Crates were the first heads of the sect. Zeno, by checking and moderating their doctrines, gave birth to the sect of Stoics.

Richterus, Disscrtatio de Cynicis, Leips., 1701; Diogenes

Lærtius, lib. vi. cap. 103.

DÆMONIST.—"To believe the governing mind, or minds, not absolutely and necessarily good, nor confined to what is best, but capable of acting according to mere will or fancy, is to be a Dæmonist."—Shaftesbury, Inquiry concerning Virtue, bk. i.

part i. sec. 2.

postulates.—Ed.] from which an inference is drawn, are called data; for example, it has always been found that the inhabitants of temperate climates have excelled those of very hot or very cold climates in stature, strength, and intelligence: these facts are the data, from which it is inferred that excellence of body and mind depend, in some measure, upon the temperature of the climate."—Taylor, Elements of Thought.

**DEDUCTION** (from deduco, to draw from, to cause to come out of), is the mental operation which consists in drawing a particular truth from a general principle antecedently known. It is opposed to induction, which consists in rising from particular truths to the determination of a general principle.

The syllogism is the form of deduction. Aristotle (Prior. Analyt., lib. i. cap. 1) has defined it to be "an enunciation in which certain assertions being made, by their being true, it follows necessarily, that another assertion different from the first is true also."

Before we can deduce a particular truth we must be in possession of the general truth. This may be acquired intuitively, as every change implies a cause; or inductively, as the volume of gas is in the inverse ratio of the pressure.

## DEDUCTION-

The principle of *deduction* is, that things which agree with the same thing agree with one another. The principle of *induction* is, that in the same circumstances, and in the same substances, from the same causes the same effects will follow.

The mathematical and metaphysical sciences are founded on deduction, the physical sciences [with Psychology.—Ed.]

rest on induction.

For the different views of deduction and induction, see Whewell, Philosoph. of Induct. Sciences, bk. i. ch. 6; Mill, Log., bk. ii. ch. 5; Quarterly Rev., vol. lxviii., art. on "Whewell."

DE FACTO and DE JURE.—In some instances the penalty attaches to the offender at the instant when the fact is committed; in others, not until he is convicted by law. In the former case he is guilty de facto, in the latter de jure.

De facto is commonly used in the sense of actually or really, and de jure in the sense of rightfully or legally; as when it is said George II. was king of Great Britain de facto; but

Charles Stuart was king de jure.

DEFINITION (definio, to mark out limits). A Definition is a categorical proposition, consisting of two classes or members, viz., a subject defined (membrum definitum) and of the defining attributes of the subject, that is, those by which it is distinguished from other things (membrum definiens). It must contain the genus proximum and the differentia. Est definitio, earum rerum, que sunt ejus rei propriæ, quam definire volumus, brevis et circumscripta quedam explicatio.—Cicero, De Orat., lib. i. cap. 42.

"The simplest and most correct notion of a definition is a proposition declaratory of the meaning of a word."—Mill,

Log., 2d ed. vol. i. p. 182.

Definition signifies "laying down a boundary;" and is used in Logic to signify "an expression which explains any term so as to separate it from everything else, as a boundary separates fields. Logicians distinguish definitions into Nominal and Real.

"Definitions are called *nominal*, which explain merely the *meaning of the term*; and *real*, which explain the nature of the thing signified by that term. Logic is concerned with *nominal* definitions alone."—Whately, *Log.*, bk. ii. ch. 2, sec. 6.

"By a real, in contrast to a verbal or nominal definition,

## DEFINITION-

the logicians do not intend 'the giving an adequate conception of the nature and essence of a thing;' that is, of a thing considered in itself, and apart from the conceptions of it already possessed. By verbal definition is meant the more accurate determination of the signification of a word; by real the more accurate determination of the contents of a notion. The one clears up the relation of words to notions; the other of notions to things. The substitution of notional for real would, perhaps, remove the ambiguity. But if we retain the term real, the aim of a verbal definition being to specify the thought denoted by the word, such definition ought to be called notional, on the principle on which the definition of a notion is called real; for this definition is the exposition of what things are comprehended in a thought."—Sir Wm. Hamilton, Reid's Works, p. 691, note.

"In the sense in which nominal and real definitions were distinguished by the scholastic logicians, logic is concerned with real, i.e., notional definitions only; to explain the meaning of words belongs to dictionaries or grammars."—

Mansel, Prolegom., Log., p. 189.

"There is a real distinction between definitions of names and what are erroneously called definitions of things; but it is that the latter, along with the meaning of a name, covertly asserts a matter of fact. This covert assertion is not a definition, but a postulate. The definition is a mere identical proposition, which gives information only about the use of language, and from which no conclusions respecting matters of fact can possibly be drawn. The accompanying postulate, on the other hand, affirms a fact which may lead to consequences of every degree of importance. It affirms the real existence of things, possessing the combination of attributes set forth in the definition, and this, if true, may be foundation sufficient to build a whole fabric of scientific truth."—Mill, Log., p. 197.

Real definitions are divided into essential and accidental. An essential definition states what are regarded as the constituent parts of the essence of that which is to be defined; and an accidental definition (or description) lays down what are regarded as circumstances belonging to it, viz., properties or

accidents, such as causes, effects, &e.

#### DEFINITION-

"Essential definition is divided into physical (natural), and logical (metaphysical); the physical definition being made by an enumeration of such parts as are actually separable; such as are the hull, masts, &c., of a 'ship;' the root, trunk, branches, bark, &c., of a 'tree.' The logical definition consists of the genus and difference, which are called by some the metaphysical (ideal) parts; as being not two real parts into which an individual object can (as in the former case), be actually divided, but only different views taken (notions formed) of a class of objects, by one mind. Thus a magnet would be defined logically, 'an iron ore having attraction for iron.'"—Whatley, Log., bk. ii. ch. 5, sec. 6.

Descriptive definition, may be—1. Causal; as when man is defined as made after the image of God, and for His glory. 2. Accidental; as when he is defined to be animal, bipes implume. 3. Genetic; as when the means by which it is made are indicated; as, if a straight line fixed at one end be drawn round by the other end so as to return to itself, a circle will be described. Or, 4. Per oppositum; as, when virtue is said to be flying from vice.

The rules of a good definition are:—1. That it be adequate. If it be too narrow, you explain a part instead of a whole; if too extensive, a whole instead of a part. 2. That it be clearer (i.e., consist of ideas less complex) than the thing defined. 3. That it be in just a sufficient number of proper words. Metaphorical words are excluded because they are indefinite.—Mansel's Aldrich, p. 35.

Aristotle, Poster. Analyt., lib. ii.; Topic., lib. vi.; Port Royal Log., part i. ch. 12, 13, 14; part ii. ch. 16; Locke, Essay on Hum. Understand., bk. iii. ch. 3 and 4; Leibnitz, Noveaux Essais, liv. iii. cap. 3 et 4; Reid, Account of Aristotle's Logic, ch. 2, sect. 4; Tappan, Appeal to Consciousness, ch. 2, sec. 1.

**DEIST** (*Deus*, God).—There are different kinds of *deists* noticed by Dr. Sam. Clarke, *Works*, vol. ii. p. 12.

- 1. Those who believe in an Eternal and Intelligent Being, but deny a Providence, either conserving or governing.
- 2. Those who believe in God and in Providence, but deny moral distinctions and moral government.
- 3. Those who believe in God and His moral perfections, but deny a future state.

DEIST-

4. Those who believe in God and His moral government, here and hereafter, in so far as the light of nature goes, but doubt or deny the doctrines of revelation.

Kant has distinguished between a theist and a deist—the former acknowledging a God, free and intelligent, the creator and preserver of all things; the latter believing that the first principle of all things is an Infinite Force, which is inherent in matter, and the blind cause of all the phenomena of nature. Deism, in this sense, is mere materialism. But deism is generally employed to denote a belief in God, without implying a belief in revelation.

"That modern species of infidelity, called deism, or natural religion, as contradistinguished from revealed."—Van Mildert,

Bampton Lect., ser. ix.

"Tindall appears to have been the first who assumed for himself, and bestowed on his coadjutors, the denomination of *Christian deists*, though it implied no less than an absolute contradiction in terms."—Van Mildert, *Bampton Lect.*, ser. x.

See Leland, View of Deistical Writers.—V. THEIST.

One of the first instances of the use of this word occurs in Vivet, Epist. Dedicat. du 2 vol. de l'instruction Chretienne, 1563, quoted by Bayle, note under the word vivet. It is appropriated in the middle of the 17th century by Herbert to his scheme, and afterwards by Blount (Oracles of Reason, p. 99), to distinguish themselves from Atheists. In strict truth, Herbert calls himself a Theist; which slightly differs from the subsequent term Deist, in so far as it is intended to convey the idea of that which he thought to be the true worship of God. It is Theism as opposed to error, rather than natural religion as opposed to revealed; whereas Deism always implies a position antagonistic to revealed religion. But the distinction is soon lost sight of; and Nichols (1696), entitles his work against the Deists, Conference with a Theist. Towards the close of the 17th century, and in the beginning of the 18th, the Christian writers sometimes even use Deist as interchangeable with Atheist, as shown above. It is also used as synonymous with one of the senses of the word Naturalist.—Farrar, Bampton Lect., p. 587.

DEMIURGE (δημιουργός, workman, architect).—Socrates and

## DEMIURGE-

Plato represented God as the architect of the universe. Plotinus confounded the demiurge with the soul of the world, and represented it as inferior to the supreme intelligence. The Gnostics represented it as an emanation from the supreme divinity, and having a separate existence. The difficulty of reconciling our idea of an infinite cause to the variable and contingent effects observable in the universe has given rise to the hypotheses of a demiurge, and of a plastic nature; but they do not alleviate the difficulty. This term is applied to God, Heb. xi. 10.

DEMON (δαίμων).—"The demon kind is of an intermediate nature between the divine and human. What is the power and virtue, said I, of this intermediate kind of being? To transmit and to interpret to the gods, what comes from men; and to men, in like manner, what comes from the gods; from men their petitions and their sacrifices; from the gods, in return, the revelation of their will."—Sydenham, Plato, The Banquet. Fell (John), Enquiry into the Doctrine of Demons, 8vo, Lond., 1797.

Socrates declared that he had a friendly spirit, or *Demon*, who restrained him from imprudence, and revealed to him what was true. Plutarch has a Dialogue on the *Demon* of Socrates, and Apuleius also wrote *De Deo Socratis*. In modern times we have Lélut, *Du Demon de Socrate*, Paris, 1836, 1856. He thinks Socrates was subject to hallucinations of sight and hearing. Psellus (Mich.) *De Operatione Demonum*, 8vo, Paris, 1615; Jacobus (I. Rex.) *Demonologie*, 4to, 1603; Abbe Migne, *Dictionaire des Sciences Occultes*, 6tom., Paris, 1846. Bodinus, in his *Demonology* (Paris 1587), speaks of his familiar spirit; and Cardan, *De Vita Propria*, does the same. In Stanley's *Hist. of Phil.*, fol. Lond. 1761, there is a Dissertation on the subject.

In old English writers this word was used to signify the pointing out the connection between a conclusion and its premises, or that of a phenomenon with its asserted cause. It now denotes a necessary consequence, and is synonymous with proof from first principles. To draw out a particular truth from a general truth in which it is enclosed, is deduction; from a necessary and universal truth to draw conse-

## DEMONSTRATION-

quences which necessarily follow, is demonstration. To connect a truth with a first principle, to show that it is this principle applied or realized in a particular case, is to demonstrate. The result is science, knowledge, certainty. Those general truths arrived at by induction in the sciences of observation, are certain knowledge. But it is knowledge which is not definite or complete. It may admit of increase or modification by new discoveries; but the knowledge which demonstration gives is fixed and unalterable.

A demonstration is a reasoning consisting of one or more arguments, by which some proposition brought into question is evidently shown to be contained in some other proposition assumed, whose truth and certainty being evident and acknowledged, the proposition in question must also be admitted as certain.

Demonstration is direct or indirect. Direct demonstration is descending—when starting from a general truth we come to a particular conclusion, which we must affirm or deny; or ascending—when starting from the subject and its attributes, we arrive by degrees at a general principle, with which we connect the proposition in question. Both these are deductive, because they connect a particular truth with a general principle. Indirect demonstration is when we admit hypothetically a proposition contradictory of that which we wish to demonstrate, and show that this admission leads to absurdity; that is, an impossibility or a contradiction. This is, demonstratio per impossible, or reductio ad absurdum. It should only be employed when direct demonstration is unattainable.

" Demonstration was divided by ancient writers into two kinds: one kind they call demonstration ὅτι; the other demonstration διότι.

"The demonstration diót, or argument from cause to effect, is most commonly employed in anticipating future events. When e.g., we argue that at a certain time the tides will be unusually high, because of its being the day following the new or the full moon, it is because we know that that condition of the moon is in some way connected as a cause with an unusually high rising of the tides as its effect, and can argue, therefore, that it will produce what is called spring tide.

#### DEMONSTRATION-

"On the other hand, the demonstration  $\delta\tau_i$ , or argument from effect to cause, is more applicable, naturally, to past events, and to the explanation of the phenomena which they exhibit as effects. Thus the presence of poison in the bodies of those whose death has been unaccountably sudden, is frequently proved in this way by the phenomena which such bodies present, and which involve the presence of poison as their cause."—Karslake, Aids to Logic, vol. ii. p. 46.

The theory of demonstration is to be found in the Organon of Aristotle, "since whose time," said Kant, "Logic, as to its foundation, has gained nothing."

DENOMINATION, External.—V. Mode.

DEONTOLOGY (τὸ δέον, what is due, or binding; λόγος, discourse).

—[Theory of duty.—Ed.]

"Deontology, or that which is proper, has been chosen as a fitter term than any other which could be found, to represent, in the field of morals, the principle of utilitarianism, or that which is useful."—Bentham, Deontology; or, the Science of Morality, vol. i. p. 34.

"The term deontology expresses moral science, and expresses it well, precisely because it signifies the science of duty, and contains no reference to utility."—Whewell, Preface to Mackintosh's Prelim. Dissert., p. 20.

Deontology involves the being bound or being under obligation; the very idea which it was selected to avoid, and which

utility does not give.

"The ancient Pythagoreans defined virtue to be "Εξις του δέοντος (that is, the habit of duty, or of doing what is binding), the oldest definition of virtue of which we have any account, and one of the most unexceptionable which is yet to be found in any system of philosophy."—Stewart, Act. and Mor. Powers, vol. ii. p. 446.

And Sir W. Hamilton (*Reid's Works*, p. 540, note) has observed that ethics are well denominated *deontology*. Description V. Definition.

DESIGN (designo, to mark out).—[Adaptation of means to ends. The evidence of design consists in the marks found in objects or in the course of events, of adaptation to the attainments of definite results. A philosophic theory of such evi-

DESIGN-

dence is named Teleology (τέλος end, and λόγος, discourse), the theory of ends, awkwardly named "final causes."-Ed.] "The atomic atheists further allege, that though there be many things in the world which serve well for uses, yet it does not at all follow that therefore they were made intentionally and designedly for those uses."—Cudworth, Intell.

Sust., p. 670.

"What is done, neither by accident, nor simply for its own sake, but with a view to some effect that is to follow, is said to be the result of design. None but intelligent beings act with design; because it requires knowledge of the connection of causes and effects, and the power of comparing ideas, to conceive of some end or object to be produced, and to devise the means proper to produce the effect. Therefore, whenever we see a thing which not only may be applied to some use, but which is evidently made for the sake of the effect which it produces, we feel sure that it is the work of a being capable of thought."-Taylor, Elements of Thought.

"When we find in nature the adaptation of means to an end, we infer design and a designer; because the only circumstances in which we can trace the origination of adaptation are those in which human mind is implicated."-Dove,

Theory of Hum. Progression, p. 482.

On the argument for the being of God from the evidences of design, or the adaptation of means to ends in the universe, see Xenophon, Memorabilia of Socrates, bk. i. ch. 4; Buffier, Treatise on First Truths, part. ii. ch. 16; Reid, Act. Pow., essay vi. ch. 6; Stewart, Act. and Mor. Pow., bk. iii. ch. 2; Paley, Nat. Theol.; Bridgewater Treatises; Burnett Prize Essays. [For Kant's criticism of the argument from design as, at the most, proving only an architect of the universe, and thereby driving us back on something more than the testimony of experience, V. Critique of Pure Reason, Transcendental Dialectic, ch. 3. Meiklejohn's Transl, p. 370. Werke, Rosencranz, ii. 470.—Ed.] V. Cause (Final).

DESIRE.—[Craving,—uneasiness from sense of want, and longing for satisfaction.—Ed.] "Desire may be defined that uneasy sensation excited in the mind by the view or by the contemplation of any desirable good which is not in our possession,

#### DESIRE-

which we are solicitous to obtain, and of which the attainment appears at least possible."—Cogan, On Passions, part i. ch. 2, sec. 3.

According to Dr. Hutcheson (Essay on the Passions, sec. i.), "desires arise in our mind from the frame of our nature, upon apprehension of good or evil in objects, actions, or events, to obtain for ourselves or others the agreeable sensation when the object or event is good; or to prevent the uneasy sensation when it is evil."

But, while desires imply intelligence, they are not the mere efflux, or product of that intelligence; and, while the objects of our desires are known, it is not, solely, in consequence of knowing them, that we desire them; but, rather, because we have a capacity of desiring. There is a tendency, on our part, towards certain ends or objects, and there is a fitness in them to give us pleasure, when they are attained. Our desires of such ends or objects are natural and primary. Natural, but not instinctive, for they imply intelligence; primary, and not factitious, for they result from the constitution of things, and the constitution of the human mind, antecedent to experience and education.

It has been maintained, however, that there are no original principles in our nature, carrying us towards particular objects, but that, in the course of experience, we learn what gives us pleasure or pain—what does good or ill—that we flee from the one class of objects, and follow after the other; that in this way, likings and dislikings—inclination and aversion, spring up within us; and that all the varions passions and pursuits of human life are produced and prompted by sensibility to pleasure and pain, and a knowledge of what affects that sensibility; and thus, all our desires may be resolved into one general desire of happiness or well-being.

There is room for difference of opinion as to the number of those desires which are original; but there is little room for doubting, that there are some which may be so designated. Every being has a nature. Everything is what it is, by having such a nature. Man has a nature, and his nature has an end. This end is indicated by certain tendencies. He feels inclination or desirc towards certain objects, which are suited to his faculties and fitted to improve them. The attainment

#### DESIRE—

of these objects gives pleasure, the absence of them is a source of uneasiness. Man seeks them by a natural and spontaneous effort. In seeking them, he comes to know them better and desire them more eagerly. But the intelligence which is gradually developed, and the development which it may give to the desires, should not lead us to overlook the fact, that the desires primarily existed, as inherent tendencies in our nature, aiming at their correspondent objects; spontaneously, it may be, in the first instance, but gradually gaining clearness and strength, by the aid and concurrence of our intellectual and rational powers.

**DESTINY** (destinatum, fixed), is the necessary and unalterable connection of events; of which the heathens made a divine power, superior to all their deities. The idea of an irresistible destiny, against which man strives in vain, pervades

the whole of Greek tragedy.—V. FATALISM.

DETERMINISM.—[The theory that all our volitions are determined by the force of motives within, which motives produce their results as invariably as physical forces effect their ends. Determinism is the name more recently preferred by the upholders of this theory of Will to the earlier designation,—Necessitarianism.—Ed.] This name is applied by Sir W. Hamilton (Reid's Works, p. 601, note) to the doctrine of Hobbes, as contradistinguished from the ancient doctrine of fatalism. The principle of the sufficient reason is likewise called by Leibnitz the principle of the determining reason. In the Dict. des Sciences Philosoph., nothing is given under determinism, but a reference made to fatalism.\* And fatalism is explained as the doctrine which denies liberty to man.—V. Necessity, Fatalism, Liberty.

DIALECTIC (dialektik).—[A Philosophy worked out by the dialectic or rationalising process from assumed premises. This stands in contrast with a Philosophy which starts with observation and analysis of facts, such as Inductive Psychology. Spinoza's Philosophy is a Dialectic, from postulated Definitions:—Hegel's Philosophy is a Dialectic founded on the

law of the evolution of dialectic thought.—Ed.]

<sup>\*</sup> But in the article "Liberté," determinism is applied to the doctrine that motives invincibly determine the will, and is opposed to liberty of indifference, which is described as the doctrine that man can determine himself without motives.

## DIALECTIC-

"Dialectic is the logic of appearance as distinguished from universal Logic, or it may be that which teaches us to excite appearance or illusion. As logical or formal it treats of the sources of error and illusion, and the mode of destroying them; as transcendental, it is the exposure of the natural and unavoidable illusion that arises from human reason itself, which is ever inclined to look upon phenomena as things in themselves, and cognitions à priori, as properties adhering to these things, and in such way to form the supersensible, according to this assumed cognition of things in themselves."—Haywood, Transl. of Kant, p. 596.

"How to divide and subdivide, and dissect, and analyze a topic, so as to be directed to the various roads of argument by which it may be approached, investigated, defended, or attacked, is the province of dialectic. How to criticise those arguments, so as to reject the sophistical, and to allow their exact weight to the solid, is the province of Logic. The dialectician is praised in proportion as his method is exhaustive; that is, in proportion as it supplies every possible form of argument applicable to the matter under discussion. The logician is praised in proportion as his method is demonstrative; that is, in proportion as it determines unanswerably the value of every argument applied to the matter under discussion. Dialectic provides, and Logic appreciates argumentation; dialectic exercises the invention, and Logic the judgment.—Taylor, Synonyms.

The Διαλεκτική of Plato, was the method of analysis by means of language, and comprised the field which his successor Aristotle separated into two, viz., Διαλεκτική Logic, the enquiry concerning Method; and Σοφία, Metaphysics, the enquiry concerning being.—Farrar, Bampton Lect., p. 108.

DIALECTICS (διαλεκτική τέχνη).—" The Greek verb διαλέγεσθαι in its widest signification,—1. Includes the use both of reason and speech as proper to man. Hence dialectics may mean Logic, as including the right use of reason and language.

2. It is also used as synonymous with the Latin word disserere, to discuss or dispute; hence, dialectics has been used to denote the Logic of probabilities, as opposed to the doctrine of demonstration and scientific induction.

3. It is also used in popular language to denote Logic properly so

## DIALECTICS-

called. But dialectics, like science, is not Logic, but the subject matter of Logic. Dialectics is handled, anatomized, and its conditions determined by Logic; but, for all that, it is not Logic, any more than the animal kingdom is Zoology, or the vegetable kingdom is Botany."—Poste, Introd. to Poster. Analyt., p. 16, 12nio, London, 1850.

Aristotle (Top., i. 10, Anal. Pr., 2, 23) says there are two kinds διαλεκτικών λόγων, viz., Έπαγωγή και συλλογισμός.—

[Induction and Deduction.]

"Xenophon tells us (Mem., iv. 5, 11) that Socrates said, 'That dialectic (το διαλέγεσθαι) was so called because it is an inquiry pursued by persons who take counsel together, separating the subjects considered according to their kinds (διαλέγουτας). He held accordingly that men should try to be well prepared for such a process, and should pursue it with diligence. By this means he thought they would become good men, fitted for responsible offices of command, and truly dialectical' (διαλεκτικώτατους). And this is, I conceive, the answer to Mr. Grote's interrogatory exclamation (vol. viii. p. 577.) 'Surely the etymology here given by Xenophon or Socrates of the word (διαλέγεσθαι), cannot be considered as satisfactory.' The two notions, of investigatory dialogue and distribution of notions according to their kinds, which are thus asserted to be connected in etymology, were, among the followers of Socrates, connected in fact; the dialectic dialogue was supposed to involve of course the dialectic division of the subject."—Dr. Whewell, On Plato's Notion of Dialectic, Trans. of Camb. Philosoph. Soc., vol. ix. part 4.

## DIANOIOLOGY-V. NOOLOGY.

DICHOTOMY (διχοτομία, cutting in two, division into two parts, logically), is a bimembral division.—"Our Saviour said to Pilate, 'Sayest thou this thing of thyself, or did others tell thee?' And all things reported are reducible to this dichotomie,—1. The fountain of invention. 2. The channel of relation."—Fuller, Worthies, vol. i. ch. 23.

"The divisions of Peter Ramus always consisted of two members, one of which was contradictory of the other, as if one should divide Eugland into Middlesex, and what is not Middlesex." In a note on this passage, Sir William Hamilton says, "There is nothing new in Ramus' Dichotomy

## DICHOTOMY-

by contradiction. It was, in particular, a favourite with

Plato,"-Reid's Works, p. 689.

"Every division, however complex, is reducible at each of its steps to a *Dichotomy*; that is, to the division of a class into two sub-classes, opposed to each other by contradiction.
—Spalding, *Logic*, p. 146.

The objections to a dischotomising method are pointed out by Aristotle, who shows that the last of the classes which we obtain by it can have only a negative character."—Bacon's

Works, by Spedding, vol. i. p. 663, note.

"whatever is predicated (i.e., affirmed, or denied) universally of any class of things, may be predicated in like manner (viz., affirmed, or denied) of anything comprehended in that class."—V. Contradiction.

DICTUM SIMPLICITER.—When a term or proposition is to be understood in its plain and unlimited sense, it is used *simpliciter*; when with limitation or reference, it is said to be used *secundum quid*—q. v.

DIFFERENCE (διαφορά, differentia).—When two objects are compared they may have qualities which are common to both, or the one may have qualities which the other has not. The first constitutes their resemblance, the second their differ-If the qualities constituting their resemblance be essential qualities, and the qualities constituting their difference be merely accidental, the objects are only said to be distinct; but if the qualities constituting their difference be essential qualities, then the objects are different.\* One man is distinct from another man, or one piece of silver from another; but a man is different from a horse, and gold is different from silver. Those accidental differences which distinguish objects whose essence is common, belong only to individuals, and are called individual or numerical differences. Those differences which cause objects to have a different nature, constitute genera and species, and are called generic or specific differences. The former are passing and variable; but the latter are permanent and form the objects of science, and furnish the grounds of all classification, division, and definition.

<sup>\*</sup> Derodon, De Universalibus, seems to use differentia and distinctio indiscriminately.

## DIFFERENCE—

The English word divers expresses difference only, but diverse expresses difference with opposition. The Evangelists narrate the same events in "divers manners," but not in "diverse manners."

Porphyry, Introd. to Categor.; Arist., Top., lib. vii. cap. 1, 2.

Animal and stone are generically different; horse and ox are specifically different; Highflyer and Eclipse are numerically or individually different.

"Difference or differentia, in Logic, means the formal or distinguishing part of the essence of a species." When I say that the differentia of a magnet is "its attracting iron," and that its property is "polarity," these are called respectively, a specific difference and property; because magnet is (I have supposed) an infima species (i.e., only a species). When I say that the differentia of iron ore is "its containing iron," and its property, "being attracted by the magnet," these are called respectively, a generic difference and property, because "iron ore" is a subaltern species or genus; being both the genus of magnet, and the species of mineral."—Whately, Log., bk. ii. ch. 5, sec. 4.

pilemma is a syllogism with a conditional premiss, in which either the antecedent or consequent is disjunctive. When an affirmative is proved, the Dilemma is said to be in the modus ponens, and the argument is called constructive; when a negative is proved, the Dilemma is said to be in the modus tollens, and the argument is called destructive. Of the constructive dilemma there are two sorts—the simple, which concludes categorically, and the complex, which has a disjunctive conclusion. There is but one sort of the true destructive dilemma.

The dilemma is used to prove the absurdity or falsehood of some assertion. A conditional proposition is assumed, the antecedent of which is the assertion to be disproved, while the consequent is a disjunctive proposition enumerating the suppositions on which the assertion can be true. Should the supposition be rejected, the assertion also must be rejected.

This syllogism was called the Syllogismus Cornutus, the two members of the consequent being the horns of the dilemma,

#### DILEMMA-

on which the adversary is caught between (διαλαμβάνεται) two difficulties. And it was called dilemma, quasi δὶς λαμβάνων; according to others it was so called from δίς, twice, and λημμα, an assumption, because in the major premiss there are generally two antecedents, which in the minor become two assumptions.

DISCOVERY.—V. INVENTION.

DISCURSUS [A reasoning process.]—"If the mind do not perceive intuitively the connection betwixt the prædicate and subject, as in the case of axioms, or selfevident propositions, it can do so no otherwise than by the intervention of other ideas, or by the use of middle terms, as they are called, in the language of Aristotle. And this application of the middle term, first to one of the terms of a proposition, and then to the other, is performed by that exercise of the intellect which is very properly called in Greek διάνοια, because the intellect in this operation goes betwixt the two terms, as it were, and passes from the one to the other. In Latin, as there is not the same facility of composition, it is expressed by two words, discursus mentis, mens being the same thing in Latin as Nove in Greek; and the Latin expression is rendered into English by discourse of reasoning, or as it is commonly called, reasoning."—Monboddo, Ancient Metaphys., bk. v. ch. 4.

"Reasoning (or discourse) is the act of proceeding from certain judgments to another founded on them (or the result of them.)" —Whately, Log., bk. ii. ch. 1, sec. 2.

DISJUNCTIVE.—V. PROPOSITION, SYLLOGISM.

DISPOSITION (διάθεσις, dispositio), according to Aristotle (Metaphysics, lib. iv. cap. 19), is the arrangement of that which has parts, either according to place, or to potentiality, or according to species; nor it is necessary that there be a certain position, as also the name disposition makes manifest." [Commonly, an inclination of our nature toward certain objects, which prompts to action. It is applied sometimes to particular motive forces, sometimes to a general characteristic of the nature.—Ed.]

As applied to mind, it supposes the relation of its powers and principles to one another, and means the resultant bias, or tendency to be moved by some of them rather than by others.

#### DISPOSITION—

Mind is essentially one. But we speak of it as having a constitution and as containing certain primary elements; and, according as these elements are combined and balanced there may be differences in the constitution of individual minds, just as there are differences of bodily temperaments; and these differences may give rise to a disposition or bias. According as intellect, or sensitivity, or will, prevails in any individual mind, there will be a correspondent bias resulting.

But it is in reference to original differences in the primary desires, that differences of disposition are most observable. Any desire, when powerful, draws over the other tendencies of the mind to its side; gives a colour to the whole character of the man, and manifests its influence throughout all his temper and conduct. His thoughts run in a particular channel, without his being sensible that they do so, except There is an undercurrent of feeling, flowing by the result. continually within him, which only manifests itself by the direction in which it carries him. This constitutes his temper.\* Disposition is the sum of a man's desires and feelings.

DISTINCTION (διαίρεσις) is wider in signification than difference; for all things that are different are also distinct; but all things that are distinct are not also different. One drop of water does not specifically differ from another; but they

are individually distinct.

Distinction is a kind of alietas or otherness. Those things are said to be distinct of which one is not the other. Thus Peter, precisely because he is not Paul, is said to be distinct from Paul.

Distinction is real and mental, a parte rei and per intellectum. Real distinction is founded in the nature of the thing, and amounts to difference. It is threefold: -1. Object from object-as God from man. 2. Mode from mode-as blue from black. 3. Mode from thing—as body from motion. Mental distinction is made by the mind-as when we distinguish between light and heat, which are naturally united, or between the length and breadth of a body. It amounts to

<sup>\* &</sup>quot;The balance of our animal principles, I think, constitutes what we call a man's natural temper."-Reid, Act. Pow., essay iii. part ii. ch. S.

#### DISTINCTION-

abstraction.—Bossuet, Log., liv. i. c. 25; Reid, Account of

Aristotle's Logic, ch. 2, sec. 3.

"Separation by the touch (dis and tango) makes a distinetion; by turning apart (dis and verto) makes a diversity; by carrying asunder (dis and fero) makes a difference; by affixing a mark (dis and erimen) makes a discrimination. Distinction, therefore, is applied to delicate variations; diversity to glaring contrasts; difference to hostile unlikenesses; and discrimination to formal criticism."—Taylor, Sunonums.

DISTRIBUTION "is the placing particular things in the places or compartments which have already been prepared to re-

ceive them."—Taylor, Elements of Thought.

"In Logic, a term is said to be distributed when it is employed in its full extent, so as to comprehend all its significates—everything to which it is applicable."—Whately, Log., bk. ii. ch. 3, sec. 2.

"A term is said to be 'distributed,' when an assertion is made or implied respecting every member of the class which the term denotes. Of every universal proposition, therefore, the subject is distributed; e.g., all men are mortal; No rational being is responsible; Whatsoever things were written aforetime were written for our learning."-Kidd, Principles of Reasoning, ch. 4, sec. 3, p. 179.

The rules for distribution are:—

1. All universal propositions, and no particular, distribute the subject.

2. All negative, and no affirmative, the predicate.—Wesley,

Guide to Syllogism, p. 10.

DITHEISM—[Theory of two gods, or co-eternal beings]. "As for that fore-mentioned ditheism, or opinion of two gods—a good and an evil one, it is evident that its original sprung from nothing else, but from a firm persuasion of the essential goodness of Deity, &c."—Cudworth, Intell. System, p. 213.

DIVISION "is the separating things of the same kind into parcels; analysis is the separating of things that are of different kinds; we divide a stick by cutting it into two, or into twenty pieces; we analyze it by separating the bark, the wood, and the pith—a division may be made at pleasure, an analysis

## DIVISION-

must be made according to the nature of the object."—Taylor,

Elements of Thought.

Division is either division proper or partition. Partition is the distribution of some substance into its parts; as of the globe into Europe, Asia, Africa, and America. Division proper is the distribution of genus and species into what is under them; as when substance is divided into spiritual and material. The members which arise from division retain the name of their whole; but not those from partition.

" Division is the separation of a whole into its parts.

"But as there are two kinds of wholes, there are also two kinds of division. There is a whole composed of parts really distinct, called in Latin, totum, and whose parts are called integral parts. The division of this whole is called properly partition; as when we divide a house into its apartments, a town into its wards, a kingdom or state into its provinces, man into body and soul, the body into its members. The sole rule of their division is, to make the enumeration of particulars very exact, and that there be nothing wanting to them.

"The other whole is called, in Latin, omne, and its parts subjected or inferior parts, inasmuch as the whole is a common term, and its parts are the terms comprising its extension. The word animal is a whole of this nature, of which the inferiors, as man and beast, which are comprehended under its extension, are subjected parts. This division obtains properly the name of division, and there are four kinds of

division which may be noticed.

"The first is, when we divide the genus by its species; every substance is body or mind, every animal is man or beast. The second is, when we divide the genus by its differences; every animal is rational or irrational, every number is even or uneven. The third is, when we divide a common subject into the opposite accidents of which it is susceptible, these being according to its different inferiors, or in relation to different times; as, every star is luminous by itself, or by reflection only; every body is in motion or at rest, &c. The fourth is, that of an accident into its different subjects, as division of goods into those of mind and body."—Port Roy. Log., part ii. ch. 15.

"Division (Logical) is the distinct enumeration of several

### DIVISION-

things signified by one common name. It is so called from its being analogous to the real division of a whole into its parts."—Whately, Log., book ii. ch. 5. sec. 5.

Aristotle, Poster. Analyt., lib. ii. c. 13; Reid, Account of

Aristotle's Logic, ch. ii. sec. 2.

DIVORCE (diverto, to separate), a separation of husband and wife.

—Paley (Mor. Phil., bk. iii. part 3, ch. 7), understands by divorce, "the dissolution of the marriage contract by the act and at the will of the husband."—Quarterly Rev., No. 203, p. 256; Milton's Doctrine of Divorce.

DOGMA.—[A formulated truth, or article of belief].

DOGMATISM (δόγμα, from δοκέω, to think).—[The affirmation of a principle or dogma as true, without evidence sufficient to substantiate it.—Ed]. "Philosophers," said Lord Bacon, "may be divided into two classes, the empirics and the dogmatists. The empiric, like the ant, is content to amass, and then consume his provisions. The dogmatist, like the spider, spins webs of which the materials are extracted from his own substance, admirable for the delicacy of their workmanship, but without solidity or use. The bee keeps a middle course—she draws her matter from flowers and gardens; then, by art peculiar to her, she labours and digests it. True philosophy does something like this."

"He who is certain, or presumes to say he knows, is, whether he be mistaken or in the right, a dogmatist."—

Shaftesbury, Miscell. Reflect., Miscell. ii. c. 2.

Kant defined dogmatism, "the presumption that we are able to attain a pure knowledge based on ideas, according to principles which the reason has long had in use, without any inquiry into the manner or into the right by which it has attained them."—Morell, Elements of Psychology, p. 236, note.

"By dogmatism we understand, in general, both all propounding and all receiving of tenets, merely from habit, without thought or examination, or, in other words, upon the authority of others; in short, the very opposite of critical investigation. All assertion for which no proof is offered is dogmatical."—Chalybæus, Specul. Philosoph., p. 4.

**DOUBT** (*dubito*, to go two ways).—[Either indecision, or absence of dogmatic conclusion upon a subject; or, more positively, an affirmation that a dogmatic conclusion is unattainable.—

DOUBT-

Ed.] Man knows some things and is ignorant of many things, while he is in doubt as to other things. Doubt is that state of mind in which we hesitate as to two contradictory conclusions—having no preponderance of evidence in favour of either. Philosophical doubt has been distinguished as provisional or definitive. Definitive doubt is scepticism. Provisional, or methodical doubt is a voluntary suspending of our judgment for a time, in order to come to a more clear and sure conclusion. This was first given as a rule in philosophical method by Descartes, who tells us that he began by doubting everything, discharging his mind of all preconceived ideas, and admitting none as clear and true till he had subjected them to a rigorous examination.

"Doubt is some degree of belief, along with the consciousness of ignorance, in regard to a proposition. Absolute disbelief implies knowledge: it is the knowledge that such or such a thing is not true. If the mind admits a proposition without any desire for knowledge concerning it, this is credulity. If it is open to receive the proposition, but feels ignorance concerning it, this is doubt. In proportion as knowledge increases, doubt diminishes, and belief or disbelief strengthens."—Taylor, Elements of Thought.—[For the

Cartesian Doubt, v. Descartes, Method, part. ii.]

"There is a great difference," says Malebranche (Recherche de la Verité, liv. i. cap. 20, sec. 3), "between doubting and doubting. We doubt through passion and brutality; through blindness and malice, and finally through fancy, and from the very wish to doubt; but we doubt also from prudence and through distrust, from wisdom and through penetration of mind. The former doubt is a doubt of darkness, which never issues to the light, but leads us always further from it; the latter is a doubt which is born of the light, and which aids in a certain sort to produce light in its turn." Philosophy, according to Aristotle (Metaph. ii. 1), is the art of doubting well.

physical repose in sleep.—Ed.] Dreams very often take their rise and character from something in the preceding state of body or mind. "Through the multitude of business cometh a dream," said Solomon; and Aristotle regarded dreams as

#### DREAMING-

the vibrations of our waking feelings.—Ethic., lib. i. cap. 13.

According to these views, dreams, instead of being prospective or prophetic, are retrospective and resultant. The former opinion, however, has prevailed in all ages and among all nations; and hence, oneiromancy or prophesying by dreams, that is, interpreting them as presages of coming events. There

is as yet no philosophy of dreaming.

DUALISM, [a theory of duality of being or force, (1) as to the origin of the world, in opposition to monotheism; (2) as to the essential difference of mind and matter in the universe, in opposition to materialism.—Ed.] "Pythagoras talked, it is said, of an immaterial unity, and a material duality, by which he pretended to signify, perhaps, the first principles of all things, the efficient and material causes."—Bolingbroke, Hum. Reason, essay ii.

Dualism is the doctrine that the universe was created and is preserved by the concurrence of two principles, equally

necessary, eternal, and independent.

Mythological dualism was held by Zoroaster and the Magi, who maintained the existence of a good principle and an evil principle; and thus explained the mixed state of things which prevails. It would appear, however, according to Zoroaster, that both Ormuzd and Ahrimanes were subordinate to Akerenes, or the supreme Deity; and that it was only a sect of the Magi who held the doctrine of dualism in its naked form. Their views were revived in the second century by the Gnostics, and in the third century were supported by Manes, whose followers were called Manicheans.

Many of the ancient philosophers regarded the universe as constituted by two principles, the one active, the other passive, the one mind, the other matter—the one soul, the other body. But the supposition of two infinities, or of two first

causes, is self-contradictory, and is now abandoned.

DUALITY of CONSCIOUSNESS is employed by Sir William Hamilton (*Metaphysics*, lect. 16) to denote the fact that in perception we are immediately conscious of an *ego* and a *non-ego*, known together and known in contrast to each other. "In this act I am conscious of myself as the perceiving subject, and of an external reality as the object perceived; and I am

DUALITY of CONSCIOUSNESS-

conscious of both existences in the same indivisible moment of intuition. The knowledge of the subject does not precede nor follow the knowledge of the object-neither determines,

neither is determined, by the other."

DURATION .- [Continuity of existence]. "After some thought has entirely disappeared from the mind it will often return, joined with the belief that it has been in the mind before; this is called memory. Memory and the consciousness of succession give us the notion signified by the word duration."— Locke, Essay on Hum. Understand., bk. ii. ch. 15.

According to Kant, duration or time, and also space, are necessary forms of the human mind, which cannot think of bodies but as existing in space, or of events but as occurring

in time.—V. TIME.

DUTY .- [Oughtness or obligedness to act in accordance with moral law. It is uniform for all in what law forbids; special and variable for individuals in what it requires. For Kant's celebrated address to Duty, see Kritik der Pract. Vernunft; Werke, Rosen., viii. Semple's Trans., 1st ed. p. 130, 2d ed. (Calderwood), p. 120.—Ed.] That which we ought to do that which we are under obligation to do. In seeing a thing to be right, we see at the same time that it is our duty to do it. There is a complete synthesis between rectitude and obligation. [?] Price has used oughtness as synonymous with rightness.—V. OBLIGATION.

Duty and right are relative terms. If it be the duty of one party to do some thing, it is the right of some other party to expect or exact the doing of it.—V. RIGHT, RECTITUDE.

See Wordsworth, Ode to Duty.

DYNAMIC.—[Having the property of force.]

DYNAMISM, the doctrine of Leibnitz, that all substance involves force.-V. MATTER.

ECLECTICISM (ἐκλέγω, to select, to choose out).—[A philosophic theory constructed by selection and combination from conflicting schemes of thought.—Ed.] The Alexandrian philosophers, or Neo-Platonicians, who arose at Alexandria about the time of Pertinax and Severus, and continued to flourish to

## ECLECTICISM—

the end of the reign of Justinian, professed to gather and unite into one body, what was true in all systems of philosophy. To their method of philosophizing, the name eclecticism was first applied. Clemens Alexandrinus (Stromm., lib. i. p. 288) said, "By philosophy I mean neither the Stoic, nor the Platonic, nor the Epicurean, nor the Aristotelian; but whatever things have been properly said by each of these sects, inculcating justice and devout knowledge,—this whole selection I call philosophy." Diogenes Lærtius tells us (1, sec. 21), that Potamos of Alexandria introduced ἐκλεκτικήν αἴρεσιν. But the method had been adopted by Plato and Aristotle before, and has been followed by many in all ages of philosophy. Leibnitz said that truth was more widely diffused than was commonly thought; but it was often burdened and weakened, mutilated and corrupted by additions which spoiled it and made it less useful. In the philosophy of the ancients, or those who had gone before, he thought there was perennis quedam philosophia —if it could only be disintricated from error and disinterred from the rubbish which overwhelmed it. In modern times the great advocate of eclecticism is Mons. Cousin. legitimacy as a mode of philosophizing has been challenged.

"The sense in which this term is used by Clemens" (of Alexandria) says Mr. Maurice (Mor. and Metaphys. Phil., p. 53), "is obvious enough. He did not care for Plato, Aristotle. Pythagoras, as such; far less did he care for the opinions and conflicts of the schools which bore their names; he found in each hints of precious truths of which he desired to avail himself; he would gather the flowers without asking in what garden they grew, the prickles he would leave for those who had a faucy for them. Eclecticism, in this sense, seemed only like another name for catholic wisdom. A man, conscious that everything in nature and in art was given for his learning, had a right to such honey wherever it was to be found; he would find sweetness in it if it was hanging wild on trees and shrubs, he could admire the elaborate architecture of the cells in which it was stored. The Author of all good to man had scattered the gifts, had imparted the skill; to receive them thankfully was an act of homage to Him. But once lose the feeling of devotion and gratitude, which belonged so remarkably to Clemens-once let it be fancied

# ECLECTICISM-

that the philosopher was not a mere receiver of treasures which had been provided for him, but an ingenious chemist and compounder of various naturally unsociable ingredients, and the eclectical doctrine would lead to more self-conceit, would be more unreal and heartless than any one of the sectarian elements out of which it was fashioned. It would want the belief and conviction which dwell, with whatever unsuitable companions, even in the narrowest theory. Many of the most vital characteristics of the original dogmas would be effaced under pretence of taking off their rough edges and fitting them into each other. In general the superficialities and formality of each creed would be preserved in the new system; its original and essential characteristics sacrificed."

"In philosophy Cicero was never more than an eclectic, that is, in point of fact, no philosopher at all. For the very essence of the philosophical mind lies in this, that it is constrained by an irresistible impulse to ascend to primary, necessary principles, and canuot halt until it reaches the living, streaming sources of truth; whereas the eclectic will stop short where he likes, at any maxim to which he chooses to ascribe the authority of a principle. The philosophical mind must be systematic, ever seeking to behold all things in their connection, as parts or members of a great organic whole, and impregnating them all with the electric spirit of order; while the eclectic is content if he can string together a number of generalizations. A philosopher incorporates and animates; an eclectic heaps and ties up. The philosopher combines multiplicity into unity; the eclectic leaves unity straggling about in multiplicity. The former opens the arteries of truth, the latter its veins."-Second Series of Guesses at Truth, edition 1848, p. 238.

See Cousin, Fragmens Philosophiques, 8vo, Paris, 1826; Jouffroy, Melanges Philosophiques, 8vo, Paris, 1833; Essays, trans. by Ripley; Damiron, Essai sur l'Histoire de la Philosophie au dirneuvieme siecle, 2 tom. 8vo, Paris, 1834.

ECONOMICS (olzos, a house; vóμος, a law),—[The science of those laws which provide for increase of comfort in the distribution and saving of what is produced.—Ed.] Treatises under this title were written by Xenophon, Aristotle, and Cicero. They seem to have treated of the best means of

#### ECONOMICS—

managing and increasing the comforts and resources of a household. Only fragments of them remain. In modern times, justice or social duty has been distinguished by Henry More into ethical, economical, and political. And economics has been employed to denote those duties which spring from the relations which exist in a family or household.

ECSTASY (Exoragis, standing out), a transport of the soul by

which it seems as if out of the body.

"Whether that which we call ccstasy be not dreaming with the eyes open, I leave to be examined."-Locke, Essay on Hum. Understand., bk. ii. ch. 19.

This word does not occur in philosophy before the time of Philo and the Alexandrians. Plotinus and Porphyry pretended to have ecstasics in which they were united to God. Among Christian writers, Bonaventura (Itinerarium Mentis in Deum), Gerson (Theologia Mystica), and Francis de Sales, recommend those contemplations which may lead to ecstasy. But there is danger of their leading to delusion, and to confound the visions of a heated imagination with higher and nearer views of spiritual things.

Baader, Traité sur l'Extase, 1817.

EDUCATION (educo, to lead out), means the development of the bodily and mental powers. The human being is born and lives amidst scenes and circumstances which have a tendency to call forth and strengthen his powers of body and mind. And this may be called the education of nature. But by education is generally meant the using those means of development which one man or one generation of men may employ in favour of another. These means are chiefly instruction, or the communication of knowledge to enlighten and strengthen the mind; and discipline, or the formation of manners and habits. Instruction and discipline may be physical or moral, that is, may refer to the body or to the mind. Both, when employed in all their extent, go to make up clucation, which is the aid given to assist the development, and advance the progress of the human being, as an individual, and as a member of a family, of a community, and a race.

"The business of education is to educe or bring out that. which is within, not merely or mainly to instruct or impose

## EDUCATION-

a form from without. Only we are not framed to be self-sufficient, but to derive our nourishment, intellectual and spiritual, as well as bodily, from without, through the ministration of others; and hence instruction must ever be a chief element of education. Hence too we obtain a criterion to determine what sort of instruction is right and beneficial—that which ministers to education, which tends to bring out, to nourish and cultivate the faculties of the mind, not that which merely piles a mass of information upon them. Moreover, since nature, if left to herself, is ever prone to rnn wild, and since there are hurtful and pernicions elements around us, as well as nourishing and salutary, pruning and sheltering, correcting and protecting are also among the principal offices of education."—Second Series, Guesses at Truth, 1848, p. 145.

Milton, On Education; Locke, On Education; Gnizot, Meditations, 8vo, Paris, 1852; Conseils d'un Père sur l'Education.

EFFECT.—That which is produced by the operation of a cause.

—V. Cause.

EGO (I—SELF).—"Supposing it proved that my thoughts and my consciousness must have a *subject*, and consequently that I exist, how do I know that all that train and succession of thoughts which I remember belong to one subject, and that the I of this moment is the very individual I of yesterday, and of time past?"—Reid, Inquiry, Introd., sec. 3.

Sir William Hamilton's note upon this passage is as follows:

—"In English, we cannot say the I and the not I, so happily as the French le moi and le non-moi, or even the German das Ich and das nicht Ich. The ambiguity arising from the identity of sound between the I and the eye, would itself preclude the ordinary employment of the former. The ego and the non-ego are the best terms we can use; and as the expressions are scientific, it is perhaps no loss that their technical precision is guarded by their non-vernacularity."

In another note (Reid's Works, note B, sec. 1, p. 806) he has added:—"The ego as the subject of thought and knowledge, is now commonly styled by philosophers the subject; and subjective is a familiar expression for what pertains to the mind or thinking principle. In contrast and correlation to these, the terms object and objective are, in like manner, now

EGO (I—SELF)—

in general use to denote the non-ego, its affections and properties, and in general, the really existent as opposed to the ideally known."

EGOISM.—[The theory that Self-existence is the only certainty.— Ed.] "Those Cartesians who in the progress of their doubts

ended in absolute egoism."

"A few bold thinkers, distinguished by the name of egoists, had pushed their scepticism to such a length as to doubt of everything but their own existence. According to these the proposition, Cogito ergo sum, is the only truth which can be regarded as absolutely certainly."—Stewart, Dissert., part ii. p. 161, and p. 175.

Dr. Reid says (Intell. Pow., essay ii. ch. 8), that some of Descartes' disciples who doubted of everything but their own existence, and the existence of the operations and ideas of their own mind, remained at this stage of his system and got the name of egoists. But Sir William Hamilton, in a note on the passage, says, "He is doubtful about the existence of this supposed sect of egoists."

The first sense and aspect of *egoism* may seem to be selfishness. But this is contradicted by the following epitaph:—

In the churchyard at Homersfield (St. Mary, Southelmham), Suffolk, was the gravestone of Robert Crytoft, who died Nov. 17, 1810, aged ninety, bearing the following epitaph:—

" MYSELF.

"As I walk'd by myself, I talk'd to myself,
And thus myself said to me,
Look to thyself, and take care of thyself,
For nobody cares for thee.
"So I turned to myself and I answered myself,

In the self-same reverie, Look to myself, or look not to myself, The self-same thing will it be."

election (eligo, to choose), [properly voluntary choice among objects presented, or means at our command. Often in the wider sense, volition, or exercise of Will.—Ed.] Is an elicit act of will, by which, after deliberation of several means to an end proposed by the understanding, the will elects one rather than any other. Volition has reference to the end, election is of the means. According to others, no distinction should be taken between election and volition; to will an end is the

## ELECTION-

same act as to choose the means. But an end may be accomplished by different means—of one or other of which there is election.

ELEMENT (στοιχειον).—[An original constituent of material existence, or, more generally, an inherent property of an object, or an essential part of a question under discussion.—Ed.] The Stoic definition of an element is, "that out, of which, as their first principle, things generated are made, and into which, as their last remains, they are resolved."—Diog. Laert., vii. 176.

"We call that elementary which in a composition cannot be divided into heterogeneous parts—thus the elements of sound constitute sound, and the last parts into which you divide it—parts which you cannot divide into other sounds of a different kind. The last parts into which bodies can be divided—parts which cannot be divided into parts of a different kind, are the elements of bodies. The elements of every being are its constitutive principle."—Arist., Metaphys., lib. iv. ch. 3. "As for the word element (\(\Sigma \tau \chi \sigma \text{sido} \right)\), it designates the case in which one thing is the primitive matter which constitutes another thing."—Arist., Metaphys., lib. x. ch. 1.

"Elements are τά ἐνυπάρχοντα αἴτια—the inherent or inexisting causes, such as matter and form. There are other causes, such as the tribe of efficient causes, which cannot be called elements, because they make no part of the substances which they generate or produce. Thus the statuary is no part of his statue; the painter of his picture. Hence it appears that all elements are causes, but not all causes elements."— Harris, Philosoph. Arrang., ch. 5, note. And in the same ch. he says, "In form and matter we place the elements of natural substance."

Materia prima, or matter without form—"\"\"\n, was an element ready to receive form. This seems to be the use of the word as retained in the communion service. Bread and wine are elements ready to receive the form of the body and blood of Christ. "Like the elements of the material world, the bases of the sacred natures into which they were transformed."—Hampden, On Scholastic Philosophy, lect. vii.—See Doublado's Letters.

## ELEMENT—

"The elementes be those original thynges unmyxt and uncompounde, of whose temperance and myxture all other thynges having corporal substance be compact; of them be foure, that is, to say, earth, water, ayre, and fyre."—Sir T. Elyot, Castel of Health, bk. i.

Element is applied analogically to many things; as to letters, the elements of words; to words, the elements of speech; and in general to the principles or first truths or rules of any

science or art.

ELEMENTOLOGY.—V. METHODOLOGY, LOGIC.

ELICIT (elicio, to draw out), is applied to acts of will which are produced directly by the will itself, and are contained within it; as velle aut nolle. An elicit act of will is either election or volition—the latter having reference to ends, and the former to means.

ELIMINATION (elimino, to throw out), in Mathematics, is the process of causing a function to disappear from an equation, the solution of which would be embarrassed by its presence there. In other writings the correct signification is, "the extrusion of that which is superfluous or irrelevant."

It is frequently used in the sense of eliciting, but incorrectly.

EMANATION (emano, to flow from).—According to several systems of philosophy and religion which have prevailed in the East, all the beings of which the universe is composed, whether body or spirit, have proceeded from, and are parts of, the Divine Being or substance. This doctrine of emanation is to be found in the systems of Zoroaster, the Gnostics, and Neo-Platonicians. It differs little, if at all, from Pantheism.

EMOTION (emoveo, to move out), is often used as synonymous with feeling. [Properly a distinct order of feeling, indicative of disturbance within, and which throws an agitating influence out upon the physical frame. The effect of emotion is to restrain or even paralyze active force. The chief emotions are Wonder, Fear, Grief.—Ed.] Strictly taken, it means "a state of feeling which, while it does not spring directly from an affection of body, manifests its existence and character by some sensible effect upon the body."

Emotions, like other states of feeling, imply knowledge.

# EMOTION-

Something beautiful or deformed, sublime or ridiculous, is known and contemplated; and on the contemplation, springs up the appropriate feeling, followed by the characteristic

expression of countenance, or attitude, or manner.

In themselves considered, emotions\* can scarcely be called springs of action. They tend rather, while they last, to fix attention on the objects or occurrences which have excited In many instances, however, emotions are succeeded by desires to obtain possession of the objects which awaken them, or to remove ourselves from the presence of such objects. When an emotion is thus succeeded by some degree of desire, it forms, according to Lord Kames, a passion, and becomes, according to its nature, a powerful and permanent spring of action.

Emotions, then, are awakened through the medium of the intellect, and are varied and modified by the conception we form of the objects to which they refer.

Emotions manifest their existence and character by sensible

effects upon the body.

Emotions, in themselves, and by themselves, lead to quieseenee and eontemplation, rather than activity. eombine with springs of action, and give to them a character and a colouring. What is said to be done from surprise or shame, has its proper spring—the surprise or shame being eoneomitant.—See Dr Chalmers, Sketches of Ment. and Mor. Phil., p. 88.

EMPIRIC, EMPIRICISM.—[The theory of knowledge or practice which regards experience as the sole criterion of truth. Its theory of knowledge derives all from sensation; its moral philosophy depends wholly upon association of feelings. -Ed]. Among the Greek physicians those who founded their practice on experience ealled themselves empirics (ἐμπειρικοί); those who relied on theory, methodists (μεθοδικοί); and those who held a middle course dogmatists (δογματικοί). The term empiricism became naturalised in England when the writings of Galen and other opponents of the empirics were

<sup>\* &</sup>quot;The feelings of beauty, grandeur, and whatever else is comprehended under the name of taste, do not lead to action, but terminate in delightful contemplation, which constitutes the essential distinction between them and the moral sentiments, to which, in some points of view, they may doubtless be likened."-Mackintosh, Dissert., p 238.

## EMPIRIC, EMPIRICSM—

in repute, and hence it was applied generally to any ignorant pretender to knowledge. It is now used to denote that kind of knowledge which is the result of experience. Aristotle applies the terms historical and empirical in the same sense. Historical knowledge is the knowledge that a thing is. Philosophical knowledge is the knowledge of its cause, or why it is. The Germans laugh at our phrase philosophical transactions, and say, "Socrates brought down philosophy from the clouds—but the English have brought her down to the dunghill."—Sir W. Hamilton, Lect. iii.

Empiricism allows nothing to be true nor certain but what is given by experience, and rejects all knowledge à priori.

In antiquity the Ionian school may be said to have been sensualist or *empirical*. The saying of Heraclitus that nothing is, but that all things are beginning to be, or are in a continual flux, amounts to a denial of the persistence of substance. Democritus and the atomists, if they admitted the substance of atoms, denied the fundamental laws of the human mind. And the teaching of Protagoras, that sense is knowledge, and man, the measure of all things, made all science individual and relative. The influence of Plato and Aristotle re-established the foundation of true philosophy, and *empiricism* was regarded as scepticism.

In the middle ages *empiricism* was found only among the physicians and alchemists, and was not the badge of any

school of philosophy.

Empiricism, as applied to the philosophy of Locke, means that he traces all knowledge to experience, ¿μπειρία. Experience, according to him, included sensation and reflection. The French philosophers, Condillac and others, rejected reflection as a distinct source of knowledge; and their doctrine, to distinguish it from that of Locke, is called sensualism. Ideology gives nothing to the mind but sensations remembered or generalized, which it calls ideas. But Reid and the common-sense philosophers, as well as Cousin and the rationalist philosophers, hold that the mind has primary beliefs, or universal and necessary ideas, which are the ground of all experience and knowledge.

Empirical or experimental "is an epithet used by Madame de Stäel and other writers on German philosophy, to dis-

EMPIRIC, EMPIRICISM—

tinguish what they call the philosophy of sensation, from that of Plato and of Leibnitz. It is, accordingly, generally, if not always, employed by them in an unfavourable sense. In this country, on the contrary, the experimental or inductive philosophy of the human mind denotes those speculations concerning mind, which, rejecting all hypothetical theories, rest solely on phenomena, for which we have the evidence of consciousness. It is applied to the philosophy of Reid, and to all that is truly valuable in the metaphysical works of Descartes, Locke, Berkeley, and Hume."—Stewart, Dissert., part. ii. p. 146, note.

EMULATION (emulus, striving; from ἄμιλλα, a strife), is the desire of superiority. It is one of those primitive desires which manifest themselves in very early years. It prompts, when properly directed and regulated, to the most strenuous and persevering exertion. Its influence in the carrying

forward of education is most important.

ENDOGAMOUS MARRIAGE is when the parties are of the same tribe—Exogamous when of different tribes. These words are used by M'Lennan, who maintains that the primitive form of marriage was by capture—that symbols of this practice still remain among many nations. He also holds that originally kinship was counted from the female.—

Primitive Marriage, Svo, Edin., 1865.

END.—[That for the attainment of which something is done. The contemplated result of activity. More generally, the actual result.—Ed.] Ends are of two kinds, according to Aristotle (Eth., lib. i. cap. 1), ἐνέργειαι, operations; ἔργα, productions. An ἐνέργεια is the end, when the object of a man's acting is the pleasure or advantage in being so employed, as in music, dancing, contemplation, &c., which produce nothing, generally speaking, beyond the pleasure which the act affords. An ἔργον is something which is produced beyond the operation or energy; thus, the shoe is the ἔργον produced by the ἐνέργεια of shoe-making.—Paul, Analysis of Arist., p. 2.

This corresponds to Adam Smith's distinction of labour as productive or unproductive, according as it gives or does not

give a material product.

An end is that for the sake of which an action is done.

END-

Hence it has been said to be, principium in intentione ct terminus in executione.

Ends have been distinguished, as supreme and ultimate, or subordinate and intermediate. That which is sought for its own sake, is the supreme and ultimate end of those actions which are done with a view to it. That which is sought for the sake of some other end, is a subordinate and intermediate end.

Ends as ultimate, are distinguished into the end simpliciter ultimus, and ends which are ultimate secundum quid. An end which is the last that is successively aimed at, in a series of actions, is called ultimate secundum quid. But that which is aimed at, exclusively for its own sake, and is never regarded as a means to any other end, is an ultimate end, simply and absolutely.

See Edwards, Dissertation concerning the End for which God created the World; Cicero, De Finibus Bonorum et Malorum.

END-IN-HIMSELF.—[Kant maintains that human nature is an end-in-itself, meaning by that expression, that Personality,—Freedom of will placed in subjection to moral law—implies that the perfection of human nature is an end-initself. The dignity of human nature is such that man is never to use himself as merely a means to an end, or to use his fellow-man as such, as if he were only a working machine. "In the whole creation every thing may be used as an end, man alone excepted. He is alone an end-in-himself."—Kritik der Praktischen Vernunft; Werke, Rosencranz, viii.—Semple's Transl., 8vo ed. p. 137, Calderwood, p. 121.—Ed.]

Ens Rationis.—That which has no existence but in the idea which the mind forms of it; as a golden mountain.

Ens Reale in philosophical language, is taken late et stricte, and is distinguished as ens potentiale, or that which may exist, and ens actuale, or that which does exist. It is sometimes taken as the concrete of essentia, and signifies what has essence and may exist—as a rose in winter. Sometimes as the participle of esse, and then it signifies what actually exists. Ens without intellect is res, a thing.

ENTELECHY (ἐντελέχεια, from ἐντελές, perfect; ἔχειν, to have; and τέλος, an end).—[Complete attainment; actuality, dis-

## ENTELECHY-

tinctness of realized existence.] "In one of the books of the Pythagoreans, viz., Ocellus Lucanus, Περί τοῦ πάντος, the word συντέλεια is used in the same sense. Hence it has been thought that this was borrowed from the Pythagoreans."-Monboddo, Ancient Metaphys., bk. i. ch. 3, p. 16, note.

Cicero (Tuscul. Quest., lib. i. quæst. 1) interprets it to mean quandam quasi continuatum motionem et perennem.

Melancthon (Opera, tom. xiii. pp. 12-14, ed. 1846) gives two interpretations of Endelechy, as he writes it. He says that ένδελεχές signifies continuus, and ένδελέχεια, continuitus. According to him, Aristotle used it as synonymous with ἐνέργεια. Hence Cicero translated it by continuous movement Argyropolus blames Cicero for this, and or agitation. explains it as meaning "interior perfection," as if it were to ἐντὸς τελειοῦν. But Melancthon thinks Cicero's explanation in accordance with the philosophy of Aristotle.

According to others, Evdenexua means continuance, and is a totally different word from ἐντελέχεια, which means actuality.— Arist. Metaphys., Bohn's Libr., pp. 68, 301; Donaldson, New

Cratylus, pp. 339-344.

According to Leibnitz, entelecheia is derived apparently from the Greek word which signifies perfect, and therefore the celebrated Hermoläus Barbarus expressed it in Latin, word for word, by perfectihabia, for act is the accomplishment of power; and he needed not to have consulted the devil, as he did, they say, to tell him this much.—Leibnitz, Theodicee, partie i. sec. 87.

"You may give the name of entelechies to all simple substances or created monads, for they have in them a certain perfection (εχουσι τὸ ἐντελές), they have a sufficiency (αὐτάρκεια) which makes them the source of their internal actions, and so to say incorporeal automatons."—Monadologie, sec. 18. He calls a monad an autarchic automaton, or first entelechiehaving life and force in itself.

"Entelechy is the opposite to potentiality, yet would be ill translated by that which we often oppose to potentiality, actuality. Eidos expresses the substance of each thing viewed in repose—its form or constitution; ἐνέργεια its substance, considered as active and generative; ἐντελέχεια seems to be

## ENTELECHY-

the synthesis or harmony of these two ideas. The effectio of Cicero, therefore, represents the most important side of it, but not the whole."—Maurice, Mor. and Metaphys. Phil., note, p. 191.

'Εντελέχεια ce qui a en soi sa fin, qui par consequent ne relève que de soi meme, et constitue une unite indivisible.— Cousin, note to *Transl. of Aristotle's Metaphysics*, bk. xii. p. 212.

"L'Entelechie est oppose a la simple puissance, comme la forme a la matière, l'être au possible. C'est elle qui, par la vertu de la fin, constitue l'essence meme des choses, et imprime le mouvement a la matière aveugle; et c'est en ce sens qu' Aristote a pu donner de l'ame cette celebre definition, qu'elle est l'entelechie ou forme premiere de tout corps naturel qui possède la vie en puissance."—Dict. des Sciences Philosoph.

Aristotle defines the soul of man to be an *entelechy* [that without which the body cannot live]; a definition of which Dr. Reid said he did not know the meaning.—Inquiry,

Hamilton's ed., p. 203.

ENTHUSIASM (ὁ θεὸς ἐν ἡμῖν)—[Inspiration; in the widest sense, fulness of ardour.—Ed.]—" is almost a synonym of genius; the moral life in the intellectual light, the will in the reason; and without it, says Seneca, nothing truly great was ever achieved."—Coleridge, Notes on Eng. Div., vol. i. p. 338.

The word occurs both in Plato and Aristotle. According to its composition, it should signify "divine inspiration." But it is applied in general to any extraordinary excitement or exaltation of mind. The raptures of the poet, the deep meditations of the philosopher, the heroism of the warrior, the devotedness of the martyr, and the ardour of the patriot, are so many different phases of enthusiasm. "According to Plutarch, there be five kinds of Enthusiasm:—Divinatory, Bacchical (or corybantical), Poetical (under which he comprehends musical also), Martial and Erotical, or Amatorie."—A Treatise concerning Enthusiasm by Meric Casaubon, D.D., ch. 1; Shaftesbury, Of Enthusiasm. See also Natural Hist. of Enthusiasm, by Isaac Taylor; Madame de Stäel, Germany; Locke, Essay on Hum. Understand., bk. iv. ch. 19; More, Enthusiasmus Triumphatus.

ENTHYMEME (ἐν θύμφ, in the mind), is an irregular syllogism in which one of the premisses is not expressed, but kept in mind; as "every animal is a substance, therefore, every man is a substance;" in which the premiss, "man is an animal," is suppressed. "This is the vulgar opinion regarding Aristotle's Enthymeme, but, as I have shown, not the correct."-See Edin. Rev., vol. lvii. p. 221; Sir William Hamilton, Reid's Works, p. 704, note. Aristotle's Syllogism was an inference in matter necessary; his Enthymeme was an inference in matter probable.—Bachmann, p. 260. The famous expression of Descartes, Cogito ergo sum, is, as to form, an enthymeme. It was not put, however, as a proof of existence, but as meaning that the fact of existing is enclosed in the consciousness of thinking.

ENTITY (entitas)—Being—in the scholastic philosophy, was

synonymous with essence.

To all individuals of a species there is something in common -a nature which transiently invests all, but belongs exclusively to none. This essence, taken by itself and viewed apart from any individual, was what the scholastics called an entity. Animals had their entity, which was called animality. Men had their entity, which was called humanity. It denoted the common nature of the individuals of a species or genus. It was the idea or model according to which we conceived of them. The question whether there was a reality corresponding to this idea, divided philosophers into Nominalists and Realists.

"It is used to denote anything that exists, as an object of

sense or of thought.-V. Ens.

ENUNCIATION, in Logic, includes the doctrine of propositionsq. v.

ENVY—[Feeling of uneasiness and displeasure at the prosperity

of another.—Ed.]

EPICHEIREMA (ἐπιχειρέω, to put one's hand to a thing), an attempted proof—is a syllogism having the major or minor premiss, or both, confirmed by an incidental proposition called a Prosyllogism. This proposition, with the premiss it is attached to, forms an enthymeme. The incidental proposition is the expressed premiss of the enthymeme, and the premiss it is attached to is the conclusion: e.g.,-

All sin is dangerous. Covetousness is sin (for it is a trans-

#### EPICHEIREMA-

gression of the law); therefore, it is dangerous. The minor premiss is an enthymeme. "Covetousness is a transgression of the law; therefore, it is sin."

EPICUREAN.—A follower of Epicurus, who was born 341 B.C.

"The system of Epicurus agreed with those of Plato, Aristotle and Zeno, in making virtue consist in acting in the most suitable manner to obtain primary objects of natural desire. It differed from all of them in two other respects:—1st, In the account which it gave of these primary objects of natural desire; and 2dly, In the account which it gave of the excellence of virtue, or the reason why that quality ought to be esteemed."—Smith; Theory of Mor. Sent., part vii. sec. 2.

See Gassendi, De Vita Moribus et Doctrina, Epicuri, 4to, Lyons, 1647.

EPISTEMOLOGY (λόγος τῆς ἐπιστήμης, the science of true knowing)—" the doctrine or theory of knowing, just as Ontology is the doctrine or theory of being."—Ferrier, Inst. of Metaphys., p. 46.

EPISYLLOGISM.—In a chain of reasoning one of the premisses of the main argument may be the conclusion of another argument, in that case called a *Prosyllogism*; or the conclusion of the main argument may be a premiss to a supplementary one, which is called an *episyllogism*. The question is, "Has A. B. been poisoned?" and the *syllogism* is, "A man who has taken a large quantity of arsenic has been poisoned, and A. B. is found to have done so, therefore, he has been poisoned." With the addition of a *prosyllogism* and an *episyllogism* the meaning would run—"A man who has taken arsenic has been poisoned; and A. B. has taken arsenic, for tests discover it (*Prosyl.*), therefore, A. B. has been poisoned, and, therefore, there cannot be a verdict of death from natural causes. (*Episyll.*)"

# EQUANIMITY.-V. MAGNANIMITY.

EQUITY (ἐπιείκεια, or τὸ Ἰσον, as distinguished from το νομικόν).—
[That which determines the equal between man and man, their rights being equal.—Ed.] It is described by Aristotle (Ethics, bk. v. ch. 10), as that kind of justice which corrects the irregularities or rigours of strict legal justice. All written laws must necessarily speak in general terms, and must leave

EQUITY-

particular cases to the discretion of the parties. An equitable man will not press the letter of the law in his own favour, when, by doing so, he may do injustice to his neighbour The ancients, in measuring rusticated building, in which the stones alternately projected and receded, used a leaden rule. Equity, like this leaden rule, bends to the specialities of every case, when the iron rule of legal justice cannot do so. - Aristotle, Rhetoric, i. 12.

"Equity contemplates the mass of rights growing out of the law of nature; and justice contemplates the mass of rights growing out of the law of society. Equity treats of our dues as equals; justice treats of our dues as fellow-subjects. The purpose of equity is respect for humanity; the purpose of justice is respect for property. Equity withstands oppression;

justice withstands injury."—Taylor, Synonyms.

" Equity, in its true and genuine meaning, is synonymous with natural justice; and to this the judge must have recourse where the laws are silent and there is nothing else to guide

his decision."-Lord Mackenzie, On Roman Law.

EQUIVOCAL words have different significations, as bull, the animal, the Pope's letter, a blunder. Gallus, in Latin, a cock, or a Frenchman. Canis, a dog, or the dog-star. They originate in the multiplicity of things and the poverty of

language.

An Equivocal noun, in Logic, has more than one signification, each of its significations being equally applicable to several objects, as bull, the animal, the Pope's letter, a blunder. "Strictly speaking, there is hardly a word in any language which may not be regarded as in this sense equivocal; but the title is usually applied only in any case when a word is employed equivocally; e.g., when the middle term is used in different senses in the two premises, or where a proposition is liable to be understood in different senses, according to the various meanings of one of its terms."—Whately, Logic, bk. iii. sec. 10.

EQUIVOCATION (aque vocare, to use one word in different senses).—"How absolute the knave is! We must speak by the card, or equivocation will undo us."-Hamlet, act v. scene 1.

In morals, to equivocate is to offend against the truth by

# EQUIVOCATION—

using language of double meaning, in one sense, with the intention of its being understood in another—or in either sense according to circumstances. The ancient oracles gave responses of ambiguous meaning. Aio, te, Eacide, Romanos posse vincere—may mean either; "I say that thou, O descendant of Æacus, canst conquer the Romans; or, "I say that the Romans can conquer thee, O descendant of Æacus." Latronem Petrum occidisse may mean, " a robber slew Peter;" or, "Peter slew a robber." Edwardum occidere nolite timere bonum est. The message penned by Adam Orleton, Bishop of Hereford, and sent by Queen Isabella to the gaolers of her husband, Edward II., being written without punctuation. the words might be read two ways; with a comma after timere, they would mean, "Edward, to kill fear not, the deed is good;" but with it after nolite, the meaning would be, "Edward kill not, to fear the deed is good."

Henry Garnet, tried for participation in the Gunpowder Plot, thus expressed himself in a paper dated 20th March 1605-6: "Concerning equivocation, this is my opinion; in moral affairs, and in the common intercourse of life, when the truth is asked among friends, it is not lawful to use equivocation, for that would cause great mischief in society—wherefore, in such cases, there is no place for equivocation. But in cases where it becomes necessary to an individual for his defence, or for avoiding any injustice or loss, or for obtaining any important advantage, without danger or mischief to any other person, then equivocation is lawful."—

Jardine, Gunpowder Plot, p. 233.

Dr Johnson would not allow his servant to say he was not at home when he really was. "A servant's strict regard for truth," said he, "must be weakened by such a practice. A philosopher may know that it is merely a form of denial, but few servants are such nice distinguishers. If I accustom a servant to tell a lie for me, have I not reason to apprehend that he will tell many lies for himself?"—Boswell, Letters, p. 32.

There may be equivocation in sound as well as in sense. It is told that the queen of George III. asked one of the dignitaries of the church, if ladies might knot on Sunday? His reply was, Ladies may not; which, in so far as sound goes, is equivocal.

ERROR.—[Deviation from fact in observation, or from the laws of Logic in reasoning.—Ed.] Error is not a fault of our knowledge, but a mistake of our judgment, giving assent to that which is not true.—Locke, Essay on Hum. Understand., bk. iv. ch. 20.

"The true," said Bossuet, after Augustine, "is that which is, the false is that which is not." To err is to fail of attaining to the true, which we do when we think that to be which is not—or think that not to be which is. Error is not in things themselves, but in the mind of him who errs, or judges not according to truth.

"The philosophy of the Pythagoreans, like that of the other sects, was divided into the exoteric and the esoteric; the open, taught to all; and the secret, taught to a select number."—Warburton, Div. Leg., bk. ii. note bb.

According to Origen, Aulus Gellius, Porphyry, and Jamblichus, the distinction of esoteric and exoteric among the Pythagoreans was applied to the disciples—according to the degree of initiation to which they had attained, being fully admitted into the society, or being merely postulants.—Ritter, Hist. de Philosophie, ton. i. p. 298, of French translation.

Plato is said to have had doctrines which he taught publicly to all—and other doctrines which he taught only to a few, in secret. There is no allusion to such a distinction of doctrines in the writings of Plato. Aristotle (Phys., lib. iv. cap. 2) speaks of opinions of Plato which were not written. But it does not follow that these were secret— Έν τοῖς λεγομένοις ἀγράφοις δόγμασιν. They may have been oral.

Aristotle himself frequently speaks of some of his writings as exoteric; and others as acroamatic, or esoteric. The former treat of the same subjects as the latter, but in a popular and elementary way; while the esoteric are more scientific in their form and matter.

Ravaisson, Essai sur la Metaphysique d'Aristote, tom. i. cap. 1; Tucker, Light of Nature, vol. ii. ch. 2; Sir A. Grant's Aristotle's Ethics, App. B, 3d ed. i. 397; Blakesly, Life of Aristotle, p. 119.—V. ACROAMATICAL.

ESSENCE (essentia, from essens, the old participle of esse, to be—introduced into the Latin tongue by Cicero). [That without

#### ESSENCE-

which the existence of the object is impossible, in contrast with accident, a property non-essential to the object.—Ed.]

"Sicut ab eo quod est sapere, vocatur sapientia; sic ab eo quod est esse, vocatur essentia."—August., De Civ., lib. xii. cap. 11.

"Totum illud per quod res est, et est id quod est."—Chauvin, Lexicon Philosoph.

"Essence may be taken for the very being of anything, whereby it is what it is."—Locke, Essay on Hum. Understand., bk. iii. ch. 3, sec. 15.

Mr Locke distinguishes the *real* and the *nominal essence*. The nominal essence depends upon the real essence; thus the *nominal* essence of gold, is that complex idea which the word "gold" represents; viz., "a body yellow, heavy, malleable, fusible, and fixed;" but its *real* essence is the constitution of its insensible parts, on which these qualities and all its other properties depend, which is wholly unknown to us.

"The essence of things is made up of that common nature wherein it is founded, and of that distinctive nature by which it is formed. This latter is commonly understood when we speak of the formality or formalis ratio (the formal consideration) of things; and it is looked upon as being more peculiarly the essence of things, though 'tis certain that a triangle is as truly made up in part of figure, its common nature, as of the three lines and angles, which are distinctive and peculiar to it.

"Whatever makes a thing to be what it is, is properly called its essence. Self-consciousness, therefore, is the essence of the mind, because it is in virtue of self-consciousness that the mind is the mind—the man himself."—Ferrier, Instit. of Metaphys., p. 245.

"All those properties or qualities, without which a thing could not exist, or without which it would be entirely altered, make up what is called the *essence* of a thing. Three lines joining are the *essence* of a triangle; if one is removed, what remains is no longer a triangle."—Taylor, *Elements of Thought*.

The essential attributes, faciunt esse entia, cause things to be what they are.

The Greeks had but one word for essence and substance, viz., ουσια. The word ὑποστασις was latterly introduced. By

# ESSENCE-

Aristotle ouoia was applied-1. To the form, or those qualities which constitute the specific nature of every being. 2. To the matter, in which those qualities manifest themselves to us—the substratum or subject (ὑποκειμενον). 3. To the eonerete or individual being (συνόλον), constituted by the union of the two preceding.

In the scholastic philosophy a distinction began to be established between essence and substance. Substance was applied to the abstract notion of matter—the undetermined subject or substratum of all possible forms, τὸ ὑποκείμενον; Essence to the qualities expressed in the definition of a thing, or those ideas which represent the genus and species. Descartes defined substance as "that which exists so that it needs nothing but itself to exist "-(Princip. Philosoph., pars, 4, see. 1)—a definition applicable to deity only. Essence he stripped of its logical signification, and made it the foundation of all those qualities and modes which we perceive in matter. Among the attributes of every substance there is one only which deserves the name of essence, and on which the others depend as modifications—as extension, in matter, and thought, in mind. He thus identified cssence and substance. But extension supposes something extended, and thought something that thinks. With Leibnitz essence and substance were the same, viz., force or power.

Essence is analogically applied to things having no real existence; and then it retains its logical sense and expresses the qualities or ideas which should enter into the definition; as when we speak of the essence of an equilateral triangle being three equal sides and three equal angles. This is the only sense in which Kant recognizes the word. In popular language csscnce is used to denote the nature of a thing.

ETERNITY, -[Infinite Duration.] It is a negative idea expressed by a positive term. It supposes a present existence, and denies a beginning or an end of that existence. Hence the schoolmen spoke of cternity, a parte ante, and a parte post. The Scotists maintained that eternity is made up of successive parts, which drop, so to speak, one from another. The Thomists held that it is simple duration, excluding the past and the future. Plato said, time is the moving shadow of eternity. The common symbol of eternity is a circle. It

### ETERNITY-

may be doubted how far it is competent to the human mind to compass in thought the idea of absolute beginning, or the idea of absolute ending.

On man's conception of eternity, see an Examination of Mr Maurice's Theory of a Fixed State out of Time, by Mr. Mansel.

"What is eternity? can aught Paint its duration to the thought? Tell all the sand the ocean laves, Tell all its changes, all its waves, Or, tell with more laborious pains, The drops its mighty mass contains; Be this astonishing account Augmented with the full amount Of all the drops that clouds have shed, Where'er their wat'ry flecces spread, Through all time's long protracted tour, From Adam to the present hour;-Still short the sum, nor can it vie With the more numerous years that lie Embosomed in eternity. Attend, O man, with awe divine, For this eternity is thine."-Gibbons.

ETERNITY (OF GOD).—Deus non est duratio vel spatium, sed durat et adest. This scholium of Sir Isaac Newton contains the germ of Dr Clarke's Demonstration of the Being of God. Time and space are qualities, and imply a substance. The ideas of time and space necessarily force themselves upon our minds. We cannot think of them as not existing. And as we think of them as infinite, they are the infinite qualities of an infinite substance, that is, of God, necessarily existing.

"To exist in time is the same thing as to exist imperfectly. God, in the language of Plotinus, is necessarily ἄχρονος, timeless."—Jules Simon, Hist. de l'Ecole d'Alexandrie, Pref.

ETHICS.—[Synonymous with "Moral Philosophy." According to etymological usage (ἀθικά, from ἐθος, custom) it applies only to that department of moral science which treats of practice in submission to moral law.—Ed.]

"Ethics extend to the investigation of those principles by which moral men are governed; they explore the nature and excellence of virtue, the nature of moral obligation, on what it is founded, and what are the proper motives of practice; morality in the more common acceptation, though not exclusively, relates to the practical and obligatory part of

## ETHICS-

ethics. Ethics principally regard the theory of morals."—Cogan, Ethic. Treat. on Passions, Introd.

Aristotle (Eth., lib. 2), says that \$\tilde{\eta}\theta\_{0\infty}\$, which signifies moral virtue, is derived from \$\tilde{\eta}\theta\_{0\infty}\$, custom; since it is by repeated acts that virtue, which is a moral habit, is acquired.—Cicero (De Fato, cap. 1), says, Quia pertinet ad mores, quod \$\tilde{\eta}\theta\_0 \tilde{\eta}\$ illivocant, nos eam partem philosophiæ, De moribus, appellare solemus: sed decet augentem linguam Latinam nominare Moralem. Ethics is thus made synonymous with morals or moral philosophy—q. v.

Ethics, taken in its widest signification, as including the moral sciences or natural jurisprudence, may be divided into—

1. Moral Philosophy, or the science of the relations, rights, and duties, by which men are under obligation towards God, themselves, and their fellow-creatures.

2. The Law of Nations, or the science of those laws by which all nations, as constituting the universal society of the human race, are bound in their mutual relations to one another.

3. Public or Political Law, or the science of the relations between the different ranks in society.

4. Civil Law, or the science of those laws, rights, and duties, by which individuals in civil society are bound,—as commercial, criminal, judicial, Roman, or modern.

5. History, Profane, Civil, and Political.—Peemans, Introd.

ad Philosoph., p. 96.

ETHNOLOGY (ξθνος, a tribe or nation, and λόγος) the science of nations, "investigates the mental and physical differences of mankind, and the organic laws upon which they depend; seeks to deduce from these investigations principles of human guidance, in all the important relations of social and national existence."

"Ethnology treats of the different races into which the human family is subdivided, and indicates the bonds which bind them all together."—Donaldson, New Cratylus, p. 13; Ethnological Journal, June 1, 1848; Edin. Rev., Oct. 1844.

**EUDÆMONISM** (εὐδαιμονία, happiness), that system of morality which makes happiness the foundation of virtue.—Whewell, *Pref. to Mackintosh's Dissert.*, p. 20.

This name, or rather Hedonism, may be applied to the

#### EUDÆMONISM-

system of Chrysippus and Epicurus. [Bentham (Deontology, i. 78) thinks "happiness" a term too high, and prefers pleasure, as embracing lower forms of enjoyment. This is Hedonism, rather than Eudæmonism.—Ed.]

## EURETIC or EURISTIC.—V. OSTENSIVE.

EVIDENCE (e and video, to see, to make see). [Testimony to reality, either from witnesses, or from concomitant facts.— Ed.] "Evidence signifies that which demonstrates, makes clear, or ascertains the truth of the very fact or point in issue, either on the one side or the other."—Blackstone, Comment., bk. iii. ch. 23.

Evidence is the ground or reason of knowledge. It is the light by which the mind apprehends things presented to it. Fulgor quidam mentis assensum rapiens.

There are as many kinds of evidence as there are powers or faculties by which we attain to truth. But according as truth may be attained, more or less directly, evidence is distinguished into intuitive and deductive.

Intuitive evidence comprehends all first truths, or principles of common sense, as, "every change implies the operation of a cause"—axioms, in science, as, "things equal to the same thing are equal to one another"—and the evidence of consciousness, whether by sense, or memory, or thought, as when we touch, or remember, or know, or feel anything. Evidence of this kind arises directly from the presence or contemplation of the object, and gives knowledge without any effort upon our parts.

Deductive evidence is distinguished as demonstrative and probable.

Demonstrative evidence rests upon axioms, or first truths, and from which, by ratiocination, we attain to other truths. It is scientific, and leads to certainty. It admits not of degrees; and it is impossible to conceive the contrary of the truth which it establishes.

Probable evidence has reference, not to necessary, but contingent truth. It admits of degrees, and is derived from various sources; the principal are the following, viz.:—
Experience, Analogy, and Testimony.

Glassford, Essay on Principles of Evidence, 8vo, Edin., 1820; Campbell, Philosophy of Rhetoric, bk. i.; Gambier, On

## EVIDENCE-

Moral Evidence, 8vo, Lond. 1824; Smedley, Moral Evidence, 8vo, Lond. 1850; Butler, Analogy, Introd.; Locke, Essay on

Hum. Understand., bk. iv. ch. 15.

EVIL is the negation or contrary of good. [In its physical application, that which injures; in its ethical, that which violates "That which hath in it a fitness to moral law.—Ed.] promote its own preservation or well-being, is called good. And, on the contrary, that which is apt to hinder it, is called evil."-Wilkins, Nat. Relig., bk. i.

"Every man calleth that which pleaseth, and is delightful to himself, good; and that evil which displeaseth him."-

Hobbes, Hum. Nat., ch. 7.

Pleasure is fit for, or agreeable to, the nature of a sensible being, or a natural good; pain is unfit, or is a natural evil.

"The voluntary application of this natural good and evil to any rational being, or the production of it by a rational being, is moral good and evil."—King, Essay on Origin of Evil, translated by Law, ch. 1, sec. 3, notes, p. 38, 5th ed.

"Metaphysical evil consists simply in imperfection, physical evil in suffering, and moral evil in sin."—Leibnitz, On Good-

ness of God, part i. sec. 21.

"Evil does not proceed from a principle of evil. Cold does not proceed from a principle of coldness, nor darkness from a principle of darkness. Evil is mere privation."—Part ii. sec. 153.

Evil is not a generation, but a degeneration; and as Augustine often expresses it, it has not an efficient, but only a

deficient cause.—De Civ. Dei, i. 17, cap. 7.

Metaphysical evil is the absence or defect of powers and capacities, and the consequent want of the higher enjoyment which might have flowed from the full and perfect possession of them. It arises from the necessarily limited nature of all created beings.

Physical evil consists in pain and suffering. It seems to be necessary as the contrast and heightener of pleasure or enjoy-

ment, and is in many ways productive of good.

Moral evil originates in the will of man, who could not have been capable of moral good without being liable to moral evil, a power to do right being, ex necessitate rei, a power to do wrong.

has been answered by—1. The doctrine of pre-existence, or that the *cvils* we are here suffering are the punishments or expiations of moral delinquencies in a former state of existence. 2. The doctrine of the Manicheans, which supposes two co-eternal and independent agencies, the one the author of good, and the other of *evil*. 3. The doctrine of optimism or, that *evil* is part of a system conducted by Almighty power, under the direction of infinite wisdom and goodness.—Stewart, *Act. and Mor. Pow.*, bk. iii. ch. 3, sec. 1.

On the origin of evil, its nature, extent, uses, &c., see Plato, Cicero, and Seneca, Malebranche and Fenelon, Clarke and Leibnitz, Bledsoe, *Theodicy*; Young, *Mystery*; King, J. Müller.

EXAMPLE.—V. ANALOGY.

excluded MIDDLE.—Principium exclusi medii inter duo contradictoria.—"By the principle of 'Contradiction' we are forbidden to think that two contradictory attributes can both be present in the same object; by the principle of 'Excluded Middle' we are forbidden to think that both can be absent. The first tells us that both differentiæ must be compatible with the genus: I cannot, for example, divide animal into animate and inanimate. The second tells us that one or the other must be found in every member of the genus."—Mansel, Prolegom. Log., p. 193.

The formula of this principle is—"Everything is either A or not A: everything is either a given thing, or something which is not that given thing." That there is no mean between two contradictory propositions is proved by Aristotle, *Metaphys.*, bk. iii. ch. 7. "So that if we think a judgment true, we must abandon its contradictory; if false, the contradictory must be accepted."—Thomson, *Laws of Thought*, p.

295.

**EXISTENCE** (cxsisto, to stand out)—Being. "The metaphysicians look upon existence as the formal and actual part of a being."—H. More, Antid. agt. Atheism, App., ch. 44.

It has been called the actus cntitativus, or that by which anything has its essence actually constituted in the nature of things.

Essence pertains to the question, Quid est? Existence pertains to the question, An est?

# EXISTENCE-

Essence formal, combined with essence substantial, gives existence; for existence is essence clothed with form.—

Tiberghien, Essai des Connaiss. Hum., p. 739, note.

Existence is the actuality of essence. It is the act by which the essences of things are actually in rerum natura—beyond their causes. Before things are produced by their causes, they are said to be in the objective power of their causes; but when produced they are beyond their causes, and are actually in rerum natura—as maggots before they are warmed into life by heat of the sun.

"Existentia est unio realis, sive actualis conjunctio partium sive attributorum quibus ens constat. . . . Existentia dicitur quasi rei extra causas et nihilum sistentia."—Peemans, Introd.

ad Philosoph., 12mo, Lovan, 1840, p. 45.

Existence and Essence.—Ineante sibi finxerunt quidam, "Essentias quasdam easque eternas, fuisse sine existentia;" siquando autem subnascatur Res istinsmodi idea similis, tunc censent existentiam essentiæ supervenientem, veram rem efficere, sive ens reale. Atque hine, essentiam et existentiam dixerunt essendi principia, sive entis constitutiva. Quicquid vero essentiam habet veram, codem tempore habet existentiam, eodem sensu quo habet essentiam, aut quo est ens, aut aliquid."—Hutcheson, Metaphys., p. 4.

"Essence, in relation to God, must involve a necessary existence; for we cannot in any measure duly conceive what he is, without conceiving that he is, and, indeed, cannot but be. The name he takes to himself is I am (or, I will be). This is the contraction of that larger name, I am what I am (or, I will be what I will be), which may seem closely to conjoin God's unquestionable necessary existence with his unsearchable, boundless essence."—Oldfield, Essay on Reason, p. 48.

See art. "Existence," in French Encyclopédie, by Mons.

Turgot.

EXOTERIC.—V. ESOTERIC.

EXPEDIENCY.—[Applied Prudence. A wise regard to results. Use of competent means for legitimate ends. It is subordinate to morality. Expediency is the wise use of means for what may be sought. Morality, the performance of what is binding on all.—Ed.]

Expediency is a word much used by the advocates of the doctrine of Utility. Paley has said, Whatever is expedient is

#### EXPEDIENCY—

right. But, says Dr. Whewell (Elements of Morality, bk. ii. ch. 25), the main significance of such assertions is in the rejection which they imply, of any independent and fundamental meaning in the term right. Those who make such assertions, intend to say that actions are right because they promote some object-human happiness, for instance; and that those who speak of actions as absolutely right, are in error. In the common use of language, we speak of actions as expedient, when they promote some end which we have selected, and which we do not intend to have questioned. If we are prepared to put forwards the end of our actions as the proper end of action, we call them, not expedient, but right. It may be expedient for a man to lie, in order to free himself from captivity. He may stay in captivity because he will not tell a lie, but in this case, we say that he does what is right, and rejects what is expedient. Expedient implies, according to its etymology, a way out of difficulties. But morality places before us a higher object than merely to escape from difficulties; she teaches us to aim at what is right. What is expedient may be expedient as a means to what is right. It may be expedient to tell the truth to rescue an innocent person from death. But we do not describe such an action properly by calling it expedient. It is much more than expedient—it is right; it is recommended not by expediency, but by duty. In such cases we can speak approvingly not only as a right means, but of the end as a right end. Truth is not properly commended when it is described as a good way of getting out of a difficulty or gaining our ends.

EXPERIENCE (ἐμπειρία, experientia). [Personal knowledge. It is identical with the facts of our consciousness.—Ed.] According to Aristotle (Analyt. Poster., ii. 19), from sense comes memory, but from repeated remembrance of the same thing

we get experience.

Wolf used experience as co-extensive with the contents of consciousness. "Experiri dicimur, quicquid ad perceptiones nostras attenti cognoscimus. Solem lueere, cognoscimus ad ea attenti, quæ visu percipimus. Unde experientia constare dicitur, quod sol luceat. Similiter ad nosmet ipsos attenti cognoscimus, nos non posse assensum præbere contradictoriis,

## EXPERIENCE-

v. g. non posse sumere tanquam verum, quod simul pluit et

non pluit."—Philosoph. Rat., sec. 664.

" Experience, in its strict sense, applies to what has occurred within a person's own knowledge. Experience, in this sense of course, relates to the past alone. Thus it is that a man knows by experience what sufferings he has undergone in some disease; or what height the tide reached at a certain time and place. More frequently the word is used to denote that judgment which is derived from experience in the primaru sense, by reasoning from that in combination with other data. Thus a man may assert, on the ground of experience, that he was enred of a disorder by such a medicine-that that medicine is generally beneficial in that disorder; that the tide may always be expected, under such circumstances, to rise to such a height. Strictly speaking, none of these can be known by experience, but are conclusions from experience. It is in this sense only that experience can be applied to the future, or, which comes to the same thing, to any general fact; as, e.g., when it is said that we know by experience, that water exposed to a certain temperature will freeze."—Whately, Log., App. i.

Mr. Locke (Essay on Hum. Understand., bk. ii. ch. 1) has assigned experience as the only and universal source of human knowledge. "Whence hath the mind all the materials of reason and knowledge? To this I answer, in one word, from experience; in that, all our knowledge is founded, and from that ultimately derives itself. Our observation, employed either about external sensible objects, or about the internal operations of our minds, perceived and reflected on by ourselves, is that which supplies our understanding with all the materials of thinking. These are the fountains of knowledge from whence all the ideas we have, or can naturally have, do

spring-that is, sensation and reflection."

In opposition to this view, it is contended that man has knowledge à priori—knowledge which experience neither does nor can give, and knowledge without which there could be no experience—inasmuch as all the generalizations of experience proceed and rest upon it.

["That all our knowledge begins with experience, there can be no doubt. . . . . But . . . . . it by no means follows that

#### EXPERIENCE-

all arises out of experience. . . . . It is therefore a question which requires close investigation, and is not to be answered at first sight—whether there exists a knowledge altogether independent of experience, and even of all sensuous impressions? Knowledge of this kind is called à priori, in contradistinction to empirical knowledge, which has its sources à posteriori, that is, in experience."—Kant's Kritik of Pure

Reason, Introd., Meiklejohn's Transl., p. 1.]

"No accumulation of experiments whatever can bring a general law home to the mind of man; because if we rest upon experiments, our conclusion can never logically pass beyond the bounds of our premises; we can never infer more than we have proved; and all the past, which we have not seen, and the future, which we cannot see, is still left open, in which new experiences may arise to overturn the present theory. And yet the child will believe at once upon a single\* experiment. Why? Because a hand divine has implanted in him the tendency to generalize thus rapidly. Because he does it by an instinct, of which he can give no account, except that he is so formed by his Maker."—Sewell, Christ. Mor., ch. 24.

"Observationes fiunt spectando id quod natura per seipsum sponte exhibet. Experimenta fiunt ponendo naturam in eas circumstantias, in quibus debeat agere, et nobis ostendere id quod querimus."—Boscovich, Note to Stay's Poem, De Systemate.

These are more fully explained and characterized in the following passage from Sir John Herschel, On the Study of

Nat. Phil., Lardner's Cyclop., No. xiv. p. 67:—

"The great, and indeed the only ultimate source of our knowledge of nature and its laws is experience; by which we mean not the experience of one man only, or of one generation, but the accumulated experience of all mankind in all ages, registered in books, or recorded by tradition. But experience may be acquired in two ways: either, first, by noticing facts as they occur, without any attempt to influence the frequency of their occurrence, or to vary the circumstances under which they occur; this is observation: or secondly, by putting in action causes and agents over which we have control, and purposely varying their combinations, and noticing what

<sup>\*</sup> As having been burnt by fire.

#### EXPERIENCE-

effects take place; this is experiment. To these two sources we must look as the fountains of all natural science."

**EXPERIMENT**—[Voluntary application of tests for the discovery of truth.—Ed.]

EXPERIMENTUM CRUCIS.—A crucial or decisive experiment in attempting to interpret the laws of nature; so ealled, by Bacon, from the crosses or way-posts used to point out roads, because they determine at once between two or more possible conclusions.

Bacon (Nov. Org., bk. ii. sec. 36) says, "Crucial instances are of this kind; when in inquiry into any nature the intellect is put into a sort of equilibrium, so that it is uncertain to which of two, or sometimes more natures, the cause of the nature inquired into ought to be attributed or assigned, on account of the frequent and ordinary concurrence of more natures than one; the instances of the cross show that the union of the one nature with the nature sought for is faithful and indissoluble; while that of the other is varied and separable; whence the question is limited, and that first nature received as the eause, and the other sent off and rejected."

Sir G. Blane (Med. Log., p. 30), notices that in chemistry a single experiment is conclusive, and the epithet experimentum crucis applied; because the crucible derives its name from

the figure of the cross being stamped upon it.

A and B, two different causes, may produce a certain number of similar effects; find some effect which the one produces and the other does not, and this will point out, as the direction post (crux), at a point where two highways meet, which of these causes may have been in operation in any particular instance. Thus, many of the symptoms of the Oriental plague are common to other diseases; but when the observer discovers the peculiar bubo or boil of the complaint, he has an instantia crucis which directs him immediately to its discovery.

by the sense of touch, and by the movement of the body, eompared with what is learnt by the eye, make up the idea expressed by the word extension."—Taylor, Elements of Thought.

Extension is that property of matter by which it occupies

#### EXTENSION-

space; it relates to the qualities of length, breadth, and thickness, without which no substance can exist; but has no respect to the size or shape of a body. Solidity is an essential quality of matter as well as extension. And it is from the resistance of a solid body, as the occasion, that we get the idea of externality.

According to the Cartesians, extension was the essence of matter. "Sola igitur extensio corporis naturam constituit, quum illa omni solum semperque conveniat, adeo ut nihil in corpore prins percipere possumus."—Le Grand, Inst. Philosoph., pars iv. p. 152.

Hobbes's views are given, *Phil. Prima*, pars ii. cap. 8, sec. 1. Locke's views are given, *Essay on Hum. Understand.*, bk. ii. ch. 13, see also ch. 15; Reid, *Inquiry*, ch. 5, sec. 5, 6; *Intell. Pow.*, essay ii. ch. 19.

Extension (Logical), when predicated as belonging to a general term, means the number of objects included under it, and comprehension means the common characters belonging to such objects.

"I call the *comprehension* of an idea, those attributes which it involves in itself, and which cannot be taken away from it without destroying it; as the *comprehension* of the idea triangle includes extension, figure, three lines, three angles, and the equality of these three angles to two right angles, &c.

"I call the extension of an idea those subjects to which that idea applies, which are also called the inferiors of a general term, which, in relation to them, is called superior, as the idea of triangle in general extends to all the different sorts of triangles."—Port. Roy. Logic, part i. ch. 6.

We cannot detach any properties from a notion without extending the list of objects to which it is applied. Thus, if we abstract from a rose its essential qualities, attending only to those which it connotes as a plant, we *cxtend* its application, before limited to flowers with red petals, to the oak, fir, &c. But as we narrow the sphere of a notion, the qualities which it *comprehends* proportionally increase. If we restrict the term body to animal, we include life and sensation—if to man, it *comprehends* reason.

Thus emerges the law of the inverse ratio between the extension of common terms and their comprehension, viz.,

# EXTENSION-

the greater the extension the less the comprehension, and vice versa.

EXTERNALITY or OUTNESS.—[Separateness from self. It applies to all that is known as distinct from myself, the knower.—Ed.] "Pressure or resistance necessarily supposes externality in the thing which presses or resists."—Adam Smith, On the Senses.

"Distance or outness is neither immediately of itself perceived by sight, nor yet apprehended or judged of by lines and angles, but is only suggested to our thoughts," &c.—Berkeley, Principles of Knowledge, part i. sec. 43.—V. Perception.

FACT—[Strictly, that which is done or accomplished. More widely, that which is known as existing.—Ed]. Whatever really exists, whether necessarily or relatively, may be called a fact. A statement concerning a number of facts, is called a doctrine (when it is considered absolutely as a truth), and a law (when it is considered relatively to an intelligence ordaining or receiving it)."—Irons, On Final Causes, p. 48.

By a matter of fact, in ordinary usage, is meant something which might, conecivably, be submitted to the senses; and about which it is supposed there could be no disagreement among persons who should be present, and to whose senses it should be submitted; and by a matter of opinion is understood anything respecting which an exercise of judgment would be called for on the part of those who should have certain objects before them, and who might conceivably disagree in their judgment thereupon."—Whately, Rhet., part i. ch. 2, sec. 4.—V. OPINION.

"By a matter of fact, I understand anything of which we obtain a conviction from our internal consciousness, or any individual event or phenomenon which is the object of sensation."—Sir G. C. Lewis, Essay on Influence of Authority, pp. 1-4.

It is thus opposed to matter of inference. Thus, the destructiveness of cholera is matter of fact, the mode of its propagation is matter of inference. Matter of fact also denotes

#### FACT-

what is certain, as opposed to matter of doubt. The existence of God is matter of fact, though ascertained by reasoning.

"The distinction of fact and theory is only relative. Events and phenomena considered as particulars which may be colligated by induction, are facts; considered as generalities already obtained by colligation of other facts, they are theories. The same event or phenomenon is a fact or a theory, according as it is considered as standing on one side or the other of the inductive bracket."—Whewell, Philosoph. Induct. Sciences, aph. 23.

"Theories which are true, are facts."—Whewell, On

Induction, p. 23.—V. OPINION, APPEARANCE.

FACTITIOUS (factito, to practise), is applied to what is the result of use or art, in distinction to what is the product of nature. Mineral waters made in imitation of the natural springs are called factitions.

Cupiditas aliorum existimationis non est factitia sed nobis congenita; deprehenditur enim et in infantibus qui, etiam ante reflectionis usum, molestia afficientur, quum parvi a ceteris penduntur.—N. Lacoudre, Inst. Philosoph., tom iii. p. 21.

"It is enough that we have moral ideas, however obtained; whether by original constitution of our nature, or factitiously, makes no difference."—Hampden, Introd. to Mor. Philosoph.,

p. 13.

"To Mr. Locke, the writings of Hobbe suggested much of the sophistry displayed in the first book of his essay on the factitious nature of our moral principles."—Stewart, Prelim.

Dissert., p. 64; Mansel, Proleg. Log., 129.

FACULTY—[A distinct power of the mind, by the action of which a distinct order of mental phenomena is produced. Properly, it is power belonging to our rational nature. The correlative designation is Capacity,—the capability of being influenced or moved under the action of thought, or by external objects.—Ed.] Facultates sunt ant quibus facilius fit, aut sine quibus omnino confici non potest.—Cicero, De Invent., lib. ii. 40.

Facultas est quælibet vis activa, seu virtus, seu potestas. Solet etiam vocari potentia, verum tunc intelligenda est potentia activa, seu habilitas ad agendum.—Chauvin, Lexicon Philosoph.

"The word faculty is most properly applied to those

powers of the mind which are original and natural, and which make part of the constitution of the mind."—Reid, Intell. Pow., essay i. ch. 1.

A faculty is the natural power by which phenomena are produced by a person that is an agent, who can direct and concentrate the power which he possesses.—Jouffroy, Melanges, Bruxell, 1834, p. 249.

Bodies have the *property* of being put in motion, or of being melted. The magnet has an attractive *power*. Plants have a medical *virtuc*. But instead of blind and fatal activity, let the being who has power be conscious of it, and be able to exercise and regulate it; this is what is meant by *faculty*. It implies intelligence and freedom. It is personality which gives the character of *facultics* to those natural powers which belong to us.—*Dict. des Sciences Philosoph*.

"The faculties of the mind and its powers," says Dr. Reid, "are often used as synonymous expressions. But," continues he, "as most synonyms have some minute distinction that deserves notice, I apprehend that the word faculty is most properly applied to those powers of the mind which are original and natural, and which make part of the constitution of the mind. There are other powers which are acquired by use, exercise, or study, which are not called faculties, but habits. There must be something in the constitution of the mind necessary to our being able to acquire habits, and this is commonly called capacity."

Such are the distinct meanings which Dr. Reid would assign to these words, and these meanings are in accordance both with their philosophical and more familiar use. The distinction between power and faculty is, that faculty is more properly applied to what is natural and original, in opposition or contrast to what is acquired. We say the faculty of judging, but the power of habit. But, as all our faculties are powers, we can apply the latter term equally to what is original and to what is acquired. And we can say, with equal propriety, the power of judging and the power of habit. The acquiring of habits is peculiar to man: at least the inferior animals do so to a very limited extent. There must, therefore, be something in the constitution of the human mind upon which the acquiring of habits depends. This,

says Dr. Reid, is called a capacity. The capacity is natural, the habit is acquired. Dr. Reid did not recognize the distinction between active and passive power. But a capacity is a passive power. The term is applied to those manifestations of mind in which it is generally regarded as passive, or as affected or acted on by something external to itself. Thus, we say a man is capable of gratitude, or love, or grief, or joy. We speak also of the capacity of acquiring knowledge. Now, in these forms of expression, the mind is considered as the passive recipient of certain affections or impressions coming upon it. Taking into account the distinction of powers as active and passive, "these terms," says Sir Wm. Hamilton (Reid's Works, p. 221), "stand in the following relations. Powers are active and passive, natural and acquired. Powers natural and active are called faculties. Powers natural and passive, capacities or receptivities. Powers acquired are habits, and habit is used both in an active and passive sense. The power, again, of acquiring a habit is called a disposition." "Facultas is derived from the obsolete Latin facul, the more ancient form of facilis, from which again facilitas is formed. It is properly limited to active power, and, therefore, is abusively applied to the mere passive affections of mind."-Sir W. Hamilton, lect. i. p. 177.

One great end and aim of philosophy is to reduce facts and phenomena to general heads and laws. The philosophy of mind endeavours to arrange and classify the operations of mind according to the general circumstances under which they are observed.

When we speak, therefore, of a power or faculty of the mind, we mean that certain operations of mind have been observed, and classified according to the conditions and circumstances under which they manifest themselves, and that distinct names have been given to these classes of phenomena, to mark what is peculiar in the act or operation, and consequently in the power or faculty to which they are referred. But when we thus classify the operations of the mind, and assign them to different powers, we are not to suppose that we divide the mind into different compartments, of which each has a different energy. The energy is the same in one and all of the operations. It is the same mind acting

according to different conditions and laws. The energy is one and indivisible. It is only the manifestations of it that we arrange and classify.

This is well put by the famous Alcuin, who was the friend and adviser of Charlemagne, in the following passage, which is translated from his work De Ratione Anima: - "The soul bears divers names according to the nature of its operations; inasmuch as it lives and makes live, it is the soul (anima); inasmuch as it contemplates, it is the spirit (spiritus); inasmuch as it feels, it is sentiment (sensus); since it reflects, it is thought (animus); as it comprehends, intelligence (mens); inasmuch as it discerns, reason (ratio); as it consents, will (voluntas); as it recollects, memory (memoria). But these things are not divided in substance as in name, for all this is the soul, and one soul only."-Locke, Essay on Hum. Understand., bk. ii. ch. 21, sec. 20.

Faculties of the Mind (Classification of).—The faculties of the human mind were formerly distinguished as gnostic or cognitive, and orectic or appetent. They have also been regarded as belonging to the understanding or to the will, and have been designated as intellectual or active. threefold classification of them proposed by Kant is now generally adopted, and they are reduced to the heads of intellect or cognition, of sensitivity or feeling, and of activity or will. Under each of these heads, again, it is common to speak of several subordinate faculties.

"This way of speaking of faculties has misled many into a confused notion of so many distinct agents in us, which had their several provinces and authorities, and did command, obey, and perform several actions, as so many distinct beings: which has been no small occasion of wrangling, obscurity, and uncertainty, in questions relating to them."—Locke, Essay on Hum. Understand., bk. ii. ch. 21, sec. 17, 20.

Dr. Brown, instead of ascribing so many distinct faculties to the mind, which is one, would speak of it as in different states, or under different affections.—Lecture xvi.—V. Opera-TIONS OF THE MIND.

"Les divers facultés que l'on considere dans l'ame, ne sont point des choses distinctes reellement, mais le même être differement consideré."—Arnaud, Des Vrais et des Fausses Idees, ch. 27.

"Quoique nous donnions a ees facultés des noms differents, par rapport a leur diverses operations, eela ne nous oblige pas a les regarder comme des ehoses differentes, ear l'entendement n'est autre ehose que l'ame, en tant qu'elle retient et se ressouvient; la volonté n'est autre ehose que l'ame, en tant qu'elle veut et qu'elle ehoisit. . . . De sorte qu'on peut entendre que toutes ces facultés ne sont, au fond, que le même ame, qui, recoit divers noms, a eause de ses differentes operations."—Bossuet, Connaissance de Dieu, eh. 1, art. 20.

"Man is sometimes in a predominant state of intelligence, sometimes in a predominant state of feeling, and sometimes in a predominant state of action and determination. To call these, however, separate faculties, is altogether beside the mark. No act of intelligence can be performed without the will, no act of determination without the intellect, and no act either of the one or the other without some amount of feeling being mingled in the process. Thus, whilst they each have their own distinctive characteristies, yet there is a perfect unity at the root."—Morell, Psychology, p. 61.

"I feel that there is no more reason for believing my mind to be made up of distinct entities, or attributes, or faculties, than that my foot is made up of walking and running. My mind, I firmly believe, thinks, and wills, and remembers, just as simply as my body walks, and runs, and rests."—Irons,

Final Causes, p. 93.

"It would be well if, instead of speaking of 'the powers (or faculties) of the mind' (which causes misunderstanding), we adhered to the designation of the several 'operations of one mind;' which most psychologists recommend, but in the sequel forget."—Feuchtersleben, Medical Psychol., 8vo, 1847, p. 120.

"The judgment is often spoken of as if it were a distinct power or faculty of the soul, differing from the imagination, the memory, &c., as the heart differs from the lungs, or the brain from the stomael. All that ought to be understood by these modes of expression is, that the mind sometimes eompares objects or notions; sometimes joins together images; sometimes has the feeling of past time with an idea now present," &c.—Taylor, Elements of Thought.

"Notwithstanding we divide the soul into several powers

and facultics, there is no such division in the soul itself, since it is the whole soul that remembers, understands, wills, or imagines. Our manner of considering the memory, understanding, will, imagination, and the like faculties, is for the better enabling us to express ourselves in such abstracted subjects of speculation, not that there is any such division in the soul itself."—Spectator, No. 600.

"The expression, 'man perceives, and remembers, and imagines, and reasons,' denotes all that is conveyed by the longer phrase, 'the mind of man has the faculties of perception, and memory, and imagination, and reasoning."-S.

Bailey, Letters on Philosoph. Hum Mind, p. 13.

"Herbart rejects the whole theory of mental inherent faculties as chimerical, and has, in consequence, aimed some severe blows at the psychology of Kant. But, in fact, it is only the rational psychology which Kant exploded, which is open to this attack. It may be that in mental, as in physical mechanics, we know force only from its effects; but the consciousness of distinct effects will thus form the real basis of psychology. The faculties may then be retained as a convenient method of classification, provided the language is properly explained, and no more is attributed to them than is warranted by conscionsness. The same consciousness which tells me that seeing is distinct from hearing, tells me also that volition is distinct from both; and to speak of the faculty of will does not necessarily imply more than the consciousness of a distinct class of mental phenomena."—Mansel, Prolegom. Log., p. 34, note. [The development theory of mind, which would trace all mental power to sensation as the primitive experience, is naturally opposed to the acknowledgment of distinct faculties .- Ed.1

FAITH.—V. BELIEF.

Faith, so far as it belongs to philosophy, has two distinct, but closely related senses, into one or other of which all its applications may be resolved. First of all, it is simply equivalent to Belief, holding for true and real. Secondly, it is used to mean confidence, trust in a statement, a principle, a person, in anything. The second of these senses necessarily includes the first, but the first may exist without the second. We may firmly believe a thing to be true, in which there may

#### FAITH-

be no need, not even a possibility, for the exercise of trust or confidence. But that in which we confide, we must, first of all, necessarily hold to be true.—Young, *Province of Reason*, p. 286.

- FALLACY (A) is an argument, or apparent argument, professing to decide the matter at issue, while it really does not. Fallacies have been arranged as logical, semi-logical, and non-logical. By Aristotle they were arranged in two classes—according as the fallacy lay in the form, in dictione; or in the matter, extra dictionem. The fallacies, in form or expression, are the following:—
  - Fallacia Æquivocationis, arising from the use of an equivocal word; as, the dog is an animal; Sirius is the dog; therefore Sirius is an animal.
  - Fallacia Amphiboliæ, arising from doubtful construction; quod tangitur a Socrate illud sentit; columna tangitur a Socrate; ergo columna sentit. In the major proposition sentit means "Socrates feels." In the conclusion, it means "feels Socrates."
  - Fallacia Compositionis, when what is proposed, in a divided sense, is afterwards taken collectively; as, two and three are even and odd; five is two and three; therefore five is even and odd.
  - Fallacia Divisionis, when what is proposed in a collective, is afterwards taken in a divided sense; as, the planets are seven; Mercury and Venus are planets; therefore Mercury and Venus are seven.
  - Fallacia Accentus, when the same thing is predicated of different terms, if they be only written or pronounced in the same way; as, Equus est quadrupes; Aristides est equus; ergo Aristides est quadrupes.
  - Fallacia Figuræ Dictionis, when, from any similitude between two words, what is granted of one is, by a forced application, predicated of another; as, projectors are unfit to be trusted; this man has formed a project; therefore, this man is unfit to be trusted.

Fallacies in the matter, or extra dictionem, according to some, are the only fallacies strictly logical; while, according to the formal school of logicians, they are beyond the province of logic altogether.

## FALLACY-

Fallacia Accidentis, when what is aeeidental is confounded with what is essential; as, we are forbidden to kill; using capital punishment is killing; we are forbidden to use capital punishment.

Fallacia a Dicto Secundum quid ad Dictum Simpliciter, when a term is used, in one premiss, in a limited, and in the other in an unlimited sense; as, the Ethiopian is white as to his teeth; therefore he is white. The converse a dicto simpliciter ad dietum secundum quid is also fallacious.-Whatever gives pain should be abstained from; therefore surgical operations should be abstained from.

Fallacia Ignorationis Elembi, is when the point in dispute is intentionally or ignorantly overlooked, and the conclusion is irrelevant. The principal forms of it are :-

1. Mistaking the question.—To prove that men unacquainted with Logic have reasoned well does not prove the

inutility of it.

2. Diverting attention from the point at issue; as Demosthenes does in his oration De Corona, and Cicero in his Pro Archia Poeta.

3. Mistaking the question; as, when the Jews perverted our Saviour's saying, "Destroy this temple," i.e., this body, into "Destroy the temple."

4. Imputing consequences or the constructive sophism; as, Phrenology leads to Materialism, therefore it is not true.

5. Introduction of rhetorial expedients, as irony, personalities, appeals to the passions, &c.

Fallacia a non Causa pro Causa, appears in the following forms:—1. Non vera pro vera; as, when Descartes explains sensation by animal spirits, the existence of which is not ascertained. 2. Non talis pro tali; as, when the Norwegians attributed the disappearance of the fish from their coast to the introduction of inoculation.—Or when one said: "I don't believe it's any use this viccination—I had a child viccinated, and he fell out of a vinder a veek arter and got killed." 3. Post hoc ergo propter hoc, when accidental antecedence and subsequence are regarded as cause and effect.

Fallacia Petitionis Principii (begging the question), when that is assumed for granted, which ought to have been proved; as, when a thing is proved by itself called petitio (statim), "he

## FALLACY—

is a man, therefore, he is a man;" or by a synonym; as, "a sabre is sharp, therefore a scimitar is;" or by anything equally unknown; as, Paradise was in Armenia, therefore, Gihon is an Asiatic river; or by anything more unknown; as, "this square is twice the size of this triangle, because equal to this circle;" or by reasoning in a circle, i.e., when the disputant tries to prove reciprocally conclusion from premises, and premises from conclusion; as, "fire is hot, therefore it burns;" and afterwards, "fire burns, therefore it is hot;" "the stars twinkle, therefore they are distant; ""the stars are distant, therefore they twinkle."

Fallacia Plurium Interogationum, when two or more questions, requiring each a separate answer, are proposed as one, so that if one answer be given, it must be inapplicable to one of the particulars asked; as, "was Pisistratus the usurper and scourge of Athens?" The answer "no" would be false of the former particular, and "yes" would be false of the latter. The fallacy is overthrown by giving to each particular a separate reply. It is the Fallacia Compositionis in an interrogative form.

FALSE, FALSITY—[Want of harmony between statement and reality.—Ed.] The false, in one sense, applies to things; and there is falsity either when things really are not, or when it is impossible they can be; as when it is said that the proportion of the diagonal to the side of a square is commensurable, or that you sit—the one is absolutely false, the other accidentally—for in the one case and the other the fact affirmed is not.

The false is also predicated of things which really exist, but which appear other than they are, or what they are not; a portrait, or a dream. They have a kind of reality, but they really are not what they represent. Thus, we say that things are false, either because they do not absolutely exist, or because they are but appearances and not realities.

Falsity is opposed to verity or truth.

To transcendental truth, or truth of being, the opposite is nonentity rather than falsity. A thing that really is, is what it is. A thing that is not is a nonentity. Falsity, then, is twofold—objective and formal. Objective falsity is when a thing resembles a thing which it really is not, or when a sign

FALSE, FALSITY—

or proposition seems to represent or enunciate what it does not. Formal falsity belongs to the intellect when it fails to discover objectively falsity, and judges according to appearances rather than the reality and truth of things. Formal falsity is error; which is opposed to logical truth. To moral truth, the opposite is falsehood or lying.

FANCY (φαντασία).—"Imagination or phantasy, in its most extensive meaning, is the faculty representative of the phenomena both of the internal and external worlds."—Sir W.

Hamilton, Reid's Works, note B, sec. 1.

"In the soul
Are many lesser faculties, that serve
Reason as chief; among them fancy next
Her office holds; of all external things
Which the five watchful senses represent
She forms imaginations, airy shapes."
Milton, Paradise Lost, bk. v.

"Where fantasy, near handmaid to the mind,
Sits and beholds, and doth discern them all;
Compounds in one things different in their kind,
Compares the black and white, the great and small."
Sir John Davies, Immortality.

"When nature rests,

Oft in her absence mimic fancy wakes

To imitate her, but, misjoining shapes,
Wild work produces oft, but most in dreams."

"Tell me where is fancy bred,
Or in the heart or in the head?
How begot, how nourished?

Merch, of Venice, act iii. seene 2.

"Break, Phantsie, from thy cave of cloud,
And wave thy purple wings,
Now all thy figures are allowed,
And various shapes of things,
Create of airy forms a stream;
It must have blood and nought of phlegm;
And though it be a waking dream,
Yet let it like an odour rise
To all the senses here,
And fall like sleep upon their eyes,
Or music on their ear."—Ben Jonson.

"How various soever the pictures of fancy, the materials, according to some, are all derived from sense; so that the maxim—Nihil est in intellectu nisi prius fuerit in sensu—though not true of the intellect, holds with regard to the phantasy."—Monboddo, Ancient Metaphys., bk. ii. ch. 7.

#### FANCY-

Addison said (Spectator, No. 411), that he used the words imagination and fancy indiscriminately.

Mr. Stewart said (Elements, ch. 5), "It is obvious that a creative imagination, when a person possesses it so habitually that it may be regarded as forming one characterstic of his genius, implies a power of summoning up at pleasure a particular class of ideas; and of ideas related to each other in a particular manner; which power can be the result only of certain habits of association, which the individual has acquired. It is to this power of the mind, which is evidently a particular turn of thought, and not one of the common principles of our nature," that Mr. Stewart would appropriate the name fancy. "The office of this power is to collect materials for the imagination; and therefore, the latter power presupposes the former, while the former does not necessarily suppose the latter. A man whose habits of association present to him, for illustrating or embellishing a subject, a number of resembling or analogous ideas, we call a man of fancy; but for an effort of imagination, various other powers are necessary, particularly the powers of taste and judgment; without which we can hope to produce nothing that will be a source of pleasure to others. It is the power of funcy which supplies the poet with metaphorical language, and with all the analogies which are the foundation of his allusions: but it is the power of imagination that creates the complex scenes he describes, and the fictitious characters he delineates. fancy we apply the epithets of rich or luxuriant; to imagir ation, those of beautiful or sublime."

Fancy was called by Coleridge "the aggregative and associative power." But Wordsworth says, "To aggregate and to associate, to evoke and to combine, belong as well to imagination as to fancy. But fancy does not require that the materials which she makes use of should be susceptible of change in their constitution from her touch; and, where they admit of modification, it is enough for her purpose if it be slight, limited, and evanescent. Directly the reverse of these are the desires and demands of the imagination. She recoils from everything but the splastic, the pliant, and the indefinite."—Wordsworth, Preface to Works, vol. i. 12mo, Lond. 1836.—V. IMAGINATION.

ably determined in the sequence of events.—Ed.] "Fatum is derived from fari; that is, to pronounce, to deeree; and in its right sense, it signifies the deeree of Providence."—Leibnitz, Fifth Paper to Dr. Clarke. "Fate, derived from the Latin fari, to speak, must denote the word spoken by some intelligent being who has power to make his words good."—Tucker, Light of Nature, vol. ii. part ii. eh. 26.

Among all nations it has been eommon to speak of fate or destiny as a power superior to gods and men—swaying all things irresistibly. This may be called the fate of poets and mythologists. Philosophical fate is the sum of the laws of the universe, the product of eternal intelligence, and the blind properties of matter. Theological fate represents Deity as above the laws of nature, and ordaining all things according to his will—the expression of that will being the law.

Leibnitz (Fifth Paper to Dr. Samuel Clarke) says:—"There is a Fatum Mahometanum, a Fatum Stoicum, and a Fatum Christianum. The Turkish fate will have an effect to happen, even though its cause should be avoided; as if there was an absolute necessity. The Stoical fate will have a man to be quiet, because he must have patience whether he will or not, since 'tis impossible to resist the course of things. But 'tis agreed that there is Fatum Christianum, a certain destiny of everything, regulated by the foreknowledge and providence of God."

"Fatalists, that hold the necessity of all human actions and events, may be reduced to these three heads—First, such as asserting the Deity, suppose it irrespectively to decree and determine all things, and thereby make all actions necessary to us; which kind of fate, though philosophers and other ancient writers have not been altogether silent of it, yet it has been principally maintained by some neoteric Christians, contrary to the sense of the ancient church. Secondly, such as suppose a Deity that, acting wisely, but necessarily, did contrive the general frame of things in the world; from whence, by a series of causes, doth unavoidably result whatsoever is so done in it: which fate is a concatenation of causes, all in themselves necessary, and is that which was asserted by the ancient Stoies, Zeno, and Chrysippus, whom the Jewish Essenes seemed to follow. And, lastly, such as hold the

#### FATALISM—

material necessity of all things without a Deity; which fate Epieurus calls τὴν τῶν Φυσιεῶν εἰμαρμένην, the fate of the naturalists, that is, indeed, the atheists, the assertors whereof may be ealled also the Democritical fatalists."—Cudworth, Intell. Syst., bk. i. ch. 1.

Cicero, De Fato; Plutarehus, De Fato; Grotius, Philoso-

phorum Sententia De Fato.

FEAR—[Internal agitation on account of apprehended evil. This agitation throws a paralysing influence over the body. It

takes rank among the Emotions.—Ed.]

this sense it includes all forms of sensibility. In a more restricted sense, it is applied to the pleasurable and painful in mind by contrast with sensibility as a characteristic of the physical.—Ed.] "This word has two meanings. First, it signifies the perceptions we have of external objects, by the sense of touch. When we speak of feeling a body to be hard or soft, or rough or smooth, hot or cold, to feel these things is to perceive them by touch. They are external things, and that act of the mind by which we feel them is easily distinguished from the objects felt. Secondly, the word feeling is used to signify the same thing as sensation; and in this sense, it has no object; the feeling and the thing felt are one and the same.

"Perhaps betwixt feeling, taken in this last sense, and sensation, there may be this small difference, that sensation is most commonly used to signify those feelings which we have by our external senses and bodily appetites, and all our bodily pains and pleasures. But there are feelings of a nobler nature accompanying our affections, our moral judgments, and our determinations in matters of taste, to which the word sensation is less properly applied." \*—Reid, Intell. Pow., essay i. eh. 1.

"Feeling, beside denoting one of the external senses, is a general term, signifying that internal act by which we are made conscious of our pleasures and our pains; for it is not limited, as sensation is, to any one sort. Thus, feeling being the genus of which sensation is a species, their meaning is the

<sup>\*</sup> The French use of sensation—as when we say such an occurrence excited a great sensation, that is, feeling of surprise, or indignation, or satisfaction—is becoming more common.

#### FEELING-

same when applied to pleasure and pain felt at the organ of sense; and accordingly we say indifferently, 'I |feel pleasure from heat, and pain from cold;' or, 'I have a sensation of pleasure from heat and of pain from cold.' But the meaning of feeling, as is said, is much more extensive. It is proper to say, I feel pleasure in a sumptuous building, in love, in friendship; and pain in losing a child, in revenge, in envy; sensation is not properly applied to any of these.

"The term feeling is frequently used in a less proper sense, to signify what we feel or are conscious of; and in that sense it is a general term for all our passions and emotions, and for all our other pleasures and pains."—Kames, Elements

of Criticism, App.

All sensations are feelings; but all feelings are not sensations. Sensations are those feelings which arise immediately and solely from a state or affection of the bodily organism. But we have feelings which are connected not with our animal, but with our intellectual, and rational, and moral nature; such as feelings of the sublime and beautiful, of esteem and gratitude, of approbation and disapprobation. Those higher

feelings it has been proposed to call Sentiments.

From its most restricted sense of the perceiving by the sense of touch, feeling has been extended to signify immediate perceiving or knowing in general. It has been applied in this sense [though not at all accurately] to the immediate knowledge which we have of first truths or the principles of "By external or internal perception, I common sense. apprehend a phenomenon of mind or matter as existing; I therefore affirm it to be. Now, if asked how I know, or am assured, that what I apprehend as a mode of mind, may not, in reality, be a mode of mind; I can only say, using the simplest language, 'I know it to be true, because I feel, and cannot but feel,' or 'because I believe, and cannot but believe,' it so to be. And lif further interrogated how I know, or am assured that I thus feel or thus believe, I can make no better answer than, in the one case, 'because I believe that I feel;' in the other, 'because I feel that I believe.' It thus appears, that when pushed to our last resort, we must retire either upon feeling or belief, or upon both indifferently. And, accordingly, among philosophers, we find that a great many employ one

### FEELING-

or other of these terms by which to indicate the nature of the ultimate ground to which our cognitions are reducible; while some employ both, even though they may award a preference to one. . . . In this application of it we must discharge that signification of the word by which we denote the phenomena of pain and pleasure."—Sir William Hamilton, Reid's Works, note A, sec. 5.—V. Belief.

FETICHISM is supposed to have been the first form of the theological philosophy; and is described as consisting in the ascription of life and intelligence essentially analogous to our own, to every existing object, of whatever kind, whether organic or inorganic, natural or artificial.—(Comte, Philosoph. Positive, i. 3.) The Portuguese call the objects worshipped by the negroes of Africa fetisso—bewitched or possessed by fairies. Such are the grisgris of Africa, the manitous and the ockis of America, and the burkhans of Siberia—good and evil genii inhabiting the objects of nature which they worship. The priests of this worship are called griots in Africa, jongleurs or jugglers in America, and chamanes in Central Asia.

Mr. Grote (Hist. of Greece, vol. v. p. 22), in reference to Xerxes scourging the Hellespont which had destroyed his bridge, remarks, that the absurdity and childishness of the proceeding is no reason for rejecting it as having actually taken place. "To transfer," continues he, "to inanimate objects the sensitive as well as the willing and designing attributes of human beings, is among the early and widespread instincts of mankind, and one of the primitive forms of religion; and although the enlargement of reason and experience gradually displaces this elementary fetichism, and banishes it from the region of reality into those of conventional fictions, yet the force of momentary passion will often suffice to supersede the acquired habit, and even an intelligent man may be impelled in a moment of agonizing pain to kick or beat the lifeless object from which he has suffered."

Dr. Reid was of opinion that children naturally believed all things around them to be alive—a belief which is encouraged by the education of the nursery. And when under the smarting of pain we kick or strike the inanimate object which is the occasion of it, we do so, he thought, by a momentary relapse into the creed of infancy and childhood.

FIGURE.—V. SYLLOGISM.

FIRST CAUSE—[The origin or source of all dependent being that is, of all being which is not self-sufficient.—Ed.]

FITNESS and UNFITNESS-The one is applied to the harmony of right actions with the dignity of our nature and with the order of things under the moral government of the world; the other to the want of such harmony or to conflict with established order.—Ed.] "They most frequently denote the congruity or incongruity, aptitude or inaptitude, of any means to accomplish an end. But when applied to actions, they generally signify the same with right and wrong; nor is it often hard to determine in which of these senses these words are to be understood. It is worth observing that fitness in the former sense is equally undefinable with fitness in the latter; or, that it is as impossible to express in any other than synonymous words, what we mean when we say of certain objects, 'that they have a fitness to one another; or are fit to answer certain purposes,' as when we say, 'reverencing the Deity is fit, or beneficence is fit to be practised.' In the first of these instances, none can avoid owning the absurdity of making an arbitrary sense the source of the idea of fitness, and of concluding that it signifies nothing real in objects, and that no one thing can be properly the means of another. In both cases the term fit signifies a simple perception of the understanding."-Price, Review, ch. 6.

According to Dr. Samuel Clarke, virtue consists in acting in conformity to the nature and fitness of things. In this theory the term fitness does not mean the adaptation of an action, as a means towards some end designed by the agent; but a congruity, proportion, or suitableness between an action and the relations, in which, as a moral being, the agent stands. Dr. Clarke has been misunderstood on this point by Dr. Brown (lect. lxxvi.) and others. See Wardlaw, Christ. Ethics, note E.

"Our perception of vice and its desert arises from, and is the result of, a comparison of actions with the nature and capacities of the agent. And hence arises a proper application of the epithets incongruous, unsuitable, disproportionate, unfit, to actions which our moral faculty determines to be vicious." —Butler, Dissertation on Virtue.

In like manner, when our moral faculty determines actions

## FITNESS and UNFITNESS-

to be virtuous, there is a propriety in the application of the

epithets congruous, suitable, proportionate, fit.

FORCE is an energy or power which has a tendency to move a body at rest, or to affect or stop the progress of a body already in motion. This is sometimes termed active force, in contradistinction to that which merely resists or retards the motion of a body, but is itself apparently inactive. But according to Leibnitz, by whom the term force was introduced into modern philosophy, no substance is altogether passive. Force, or a continual tendency to activity, was originally communicated by the Creator to all substances, whether material or spiritual. Every force is a substance, and every substance is a force. The two notions are inseparable; for you cannot think of action without a being, nor of a being without activity. A substance entirely passive is a contradictory idea. See Leibnitz, De prime Philosophia emendatione, et de notione substantia.—V. Monad.

In like manner Boscovish maintained that the ultimate particles of matter are indivisible and unextended points, endowed with the forces of attraction and repulsion.—Dissertationes due de viribus vivis, 4to, 1745. See also Stewart, Philosophical Essays, essay ii. ch. 1.

According to the dynamic theory of Kant, and the atomic theory of Leucippus, the phenomena of matter were explained

by attraction and repulsion.

"La force proprement dite, c'est ce qui regit les actes, sans regler les volontes." If this definition of force, which is given by Mons. Comte, be adopted, it would make a distinction between force and power. Power extends to volitions as well as to operations, to mind as well as matter. But we also speak of force as physical, vital, and mental.

FORM,—[Primarily, the figure or shape of material objects. The "form" of knowledge, in the system of Kant, is that which the mind itself contributes as the condition of knowing. So, with him, Space and Time are "forms" of knowledge.

"That which in the phenomenon corresponds to the sensation, I term its matter; but that which effects (secures) that the content of the phenomenon can be arranged under certain relations, I call it form."—Krit. der Rein. Vernunft, Meiklejohn's Transl. p. 21.—Ed.]

FORM-

"Form is that of which matter is the receptacle," says Lord Monboddo (Ancient Metaphys., bk. ii. ch. 2). A trumpet may be said to consist of two parts; the matter or brass of which it is made, and the form which the maker gives to it. The latter is essential, but not the former; since although the matter were silver, it would still be a trumpet; but without the form it would not. Now, although there can be no form without matter, yet as it is the form which makes the thing what it is, the word form came to signify essence or nature. "Form is the essence of the thing, from which result not only its figure and shape, but all its qualities."

Matter void of form, but ready to receive it, was called, in metaphysics, materia prima, or elementary; in allusion to which Butler has made Hudibras say, that he

"Professed He had first matter seen undressed, And found it naked and alone, Before one rag of form was on."

Form was defined by Aristotle  $\lambda \delta \gamma o \zeta \sigma \tilde{\eta} \zeta \circ \delta \sigma \delta \alpha \zeta$ , and as  $\delta \delta \sigma \sigma \alpha \alpha \zeta$  signifies, equally, substance and essence, hence came the question whether form should be called substantial or essential; the Peripatetics espousing the former epithet, and the Cartesians the latter.

According to the Peripatetics, in any natural composite body, there were—1. The matter. 2. Quantity, which followed the matter. 3. The substantial form. 4. The qualities which followed the form. According to others, there were only—1. Matter. 2. Essential form; as quantity is identified with matter, and qualities with matter or form, or the compound of them.

According to the Peripatetics, form was a subtle substance, penetrating matter, and the cause of all acts of the compound; in conformity with the saying, formæ est agere, materiæ vero pati. According to others, form is the union of material parts, as atoms, or elements, &c., to which some added a certain motion and position of the parts.—Derodon, Phys., pars prima, pp. 11, 12.

He who gives form to matter, must, before he do so, have in his mind some idea of the particular form which he is FORM-

about to give. And hence the word form is used to signify an idea.

Idea and Law are the same thing, seen from opposite points. "That which contemplated objectively (that is, as existing externally to the mind), we call a law; the same contemplated subjectively (that is, as existing in a subject or mind), is an idea. Hence Plato often names ideas laws: and Lord Bacon. the British Plato (?), describes the laws of the material universe as ideas in nature. Quod in natura naturata lex, in natura, naturante idea dictur."-Coleridge, Church and State, p. 12. In Nov. Org., ii. 17, Bacon says, "When we speak of forms, we understand nothing more than the laws and modes of action which regulate and constitute any simple nature, such as heat, light, weight, in all kinds of matter susceptible of them; so that the form of heat, or the form of light, and the law of heat, and the law of light, are the same thing." Again he says, "Since the form of a thing is the very thing itself, and the thing no otherwise differs from the form, than as the apparent differs from the existent, the outward from the inward, or that which is considered in relation to man from that which is considered in relation to the universe, it follows clearly that no nature can be taken for the true form, unless it ever decreases when the nature itself decreases, and in like manner is always increased when the nature is increased."-Nov. Org., 2, 13.

As the word form denotes the law, so it may also denote the class of cases brought together and united by the law. "Thus to speak of the form of animals might mean, first, the law or definition of animal in general; second, the part of any given animal by which it comes under the law, and is what it is; and last, the class of animals in general formed by the law."—Thomson, Outline of Laws of Thought, p. 33, 2d ed.

"The sense attached at the present day to the words form and matter, is somewhat different from, though closely related to, these. The form is what the mind impresses upon its perceptions of objects, which are the matter; form therefore means mode of viewing objects that are presented to the mind. When the attention is directed to any object, we do not see the object itself, but contemplate it in the light of our own

#### FORM-

prior conceptions. A rich man, for example, is regarded by the poor and ignorant under the form of a very fortunate person, able to purchase luxuries which are above their own reach; by the religious mind under the form of a person with more than ordinary temptations to contend with; by the political economist, under that of an example of the unequal distribution of wealth; by the tradesman, under that of one whose patronage is valuable. Now, the object is really the same to all these observers; the same rich man has been represented under all these different forms. And the reason that the observers are able to find many in one, is that they connect him severally with their own prior conceptions. The form, then, in this view, is mode of knowing; and the matter is the perception, or object we have to know."—Ibid, p. 34.

Sir W. Hamilton calls the theory of substantial forms, "the theory of qualities viewed as entities conjoined with, and not as mere dispositions or modifications of matter."—Reid's

Works, p. 827.

Aristotle, Metaphys., lib. 7 et 8; Michelet, Examen Critique de la Metaphysique d'Aristote, 8vo, Paris, 1836, p. 164 et p. 287; Ravaisson, Essai sur la Metaphysique d'Aristote, 8vo, Paris,

1837, tom i. p. 149.—V. LAW, MATTER.

itself actively by resolution or constancy, which consists in adhering to duty in the face of danger and difficulty which cannot be avoided, or by intrepidity or courage, which consists in maintaining firmness and presence of mind in the midst of perils from which there may be escape. The displays of fortitude passively considered may be comprehended under the term patience, including humility, meekness, submission, resignation, &c. [For Plato's account of this virtue, see Republic, iv. 429; for Aristotle's, Ethics, iii. ch. iv.—Ed.]

FREETHINKER.—This term is applied to Toland, "a candid Free-thinker," by Molyneux, in a letter to Locke, 1697 (Works, fol. ed. iii. 624); and Shaftesbury, in 1709, speaks of "our modern free-writers" (Works, vol. i. p. 65). But it was Collins, in 1713, in his Discourse of Free-thinking, who first appropriated the name to express the independence of inquiry which was claimed by the Deists. There is no parallel word in other languages.—Farrar, Bumpton Lect., p. 588.

FREE WILL—[Power of self-determination. Power of self-regulation under the guidance of intelligence.—Ed]. V. LIBERTY, NECESSITY, WILL.

FRIENDSHIP is the mutual affection cherished by two persons of congenial minds. It springs from the social nature of man, and rests on the esteem which each entertains for the good qualities of the other. The resemblance in disposition and character between friends may sometimes be the occasion of their contracting friendship, but it may also be the effect of imitation and frequent and familiar intercourse. And the interchange of kind offices which takes place between friends is not the cause of their friendship, but its natural result. Familiarities founded on views of interest or pleasure are not to be dignified by the name of friendship.

Dr. Brown (lect. lxxxix.) has classified the duties of friend-ship as they regard the commencement of it, the continuance of

it, and its close.

See the various questions connected with *friendship* treated by Aristotle, in *Ethics*, bks. viii. and ix., and by Cicero, in his treatise *De Amicitia*.

FUNCTION (funger, to perform).—[The special exercise or form of activity belonging to a power when operating for the attainment of its appropriate end.—Ed.] The pre-constituted forms or elements under which the reason forms cognitions and assigns laws, are called ideas. The capacities of the reason to know in different modes and relations, we shall call its functions."—Tappan, Log., p. 119.

"The Function of conception is essential to thought. The first intention of every word is its real meaning; the second intention, its logical value, according to the function of thought to which it belongs."—Thomson, Outline of Laws of Thought,

pp. 25 and 40, 2d ed.

"The function of names is that of enabling us to remember and to communicate our thoughts."—Mill, Log., bk. ii. ch. 2, sec. 2.

"The word functio, in Latin, simply expresses performance or operation; functio muneris is the exertion of an energy of some determinate kind, but with us the word function has come to be employed in the sense of munus alone, and means not the exercise, but the specific character, of a power. Thus the function of a clergyman does not mean with us the per-

# FUNCTION-

formance of his duties, but the peculiarity of these duties The function of nutrition does not mean the operation of that animal power, but its discriminate character."—Hamilton, Lects., i. 180.

# GENERAL TERM.-V. TERM.

GENERALIZATION "is the act of comprehending, under a common name, several objects agreeing in some point which we abstract from each of them, and which that common name serves to indicate."

"When we are contemplating several individuals which resemble each other in some part of their nature, we can (by attending to that part alone, and not to those points wherein they differ) assign them one common name, which will express or stand for them merely as far as they all agree; and which, of course, will be applicable to all or any of them (which process is called generalization); and each of these names is called a common term, from its belonging to them all alike; or a predicable, because it may be predicated affirmatively of them or any of them."—Whately, Log., bk. ii. ch. 5, sec. 2.

Generalization is of two kinds-classification and generaliza-

tion properly so called.

When we observe facts accompanied by diverse circumstances, and reduce these circumstances to such as are essential and common, we obtain a law.

When we observe individual objects and arrange them according to their common characters, we obtain a class. When the characters selected are such as belong essentially to the nature of the objects, the class corresponds with the law. When the character selected is not natural the classification is artificial. If we were to class animals into white and red, we would have a classification which had no reference to the laws of their nature. But if we classify them as vertebrate or invertebrate, we have a classification founded on their organisation. Artificial classification is of no value in science, it is a mere aid to the memory. Natural classification is the foundation of all science. This is sometimes

### GENERALIZATION—

called generalization. It is more properly classification.—V. Classification.

The law of gravitation is exemplified in the fall of a single stone to the ground. But many stones and other heavy bodies must have been observed to fall before the fact was generalized, and the law stated. And in this process of generalizing there is involved a principle which experience does not furnish. Experience, how extensive soever it may be, can only give the particular, yet from the particular we rise to the general, and affirm not only that all heavy bodies which have been observed, but that all heavy bodies, whether they have been observed or not, gravitate. In this is implied a belief that there is order in nature, that under the same circumstances the same substances will present the same phenomena. This is a principle furnished by reason, the process founded on it embodies elements furnished by experience.—V. Induction.

The results of generalization are general notions expressed by general terms. Objects are classed according to certain properties which they have in common, into genera and species. Hence arose the question which caused centuries of acrimonious discussion. Have genera and species a real, independent existence, or are they only to be found in the mind?—V. Realism, Nominalism, Conceptualism, Specialization.—Reid, Intell. Pow., essay v. ch. 6; Stewart, Elements, ch. 4.

The principle of generalization is, that beings howsoever different agree or are homogeneous in some respect.

GENIUS (from geno, the old form of the verb gigno, to produce).

This word was in ancient times applied to the tutelary god or spirit appointed to watch over every individual from his birth to his death. As the character and capacities of men were supposed to vary according to the higher or lower nature of their genius, the word came to signify the natural powers and abilities of men, and more particularly their natural inclination or disposition. But the peculiar and restricted use of the term is to denote that high degree of mental power which produces or invents. "Genius," says Dr. Blair (Lectures on Rhetorie, lect. iii.), "always imports something inventive or creative." "It produces," says

## GENIUS-

another, "what has never been accomplished, and which all in all ages are constrained to admire. Its chief elements are the reason and the imagination, which are alone inventive and productive. According as one or other predominates, genius becomes scientific or artistic. In the former case, it seizes at once those hidden affinities which otherwise do not reveal themselves, except to the most patient and vigorous application; and as it were intuitively recognizing in phenomena the unalterable and eternal, it produces truth. In the latter, seeking to exhibit its own ideas in due and appropriate forms, it realizes the infinite under finite types, and so creates the beautiful."

"To possess the powers of common sense in a more eminent degree, so as to be able to perceive identity in things widely different, and diversity in things nearly the same; this it is that constitutes what we call genius, that power divine, which through every sort of discipline renders the difference so conspicuous between one learner and another."—Harris,

Philosoph. Arrange., ch. 9.

"Nature gives men a bias to their respective pursuits, and that strong propensity, I suppose, is what we mean by genius."-Couper.

Dryden has said,-

"What the child admired, The youth endeavoured, and the man acquired."

He read Polybius, with a notion of his historic exactness, before he was ten years old. Pope, at twelve, feasted his eyes in the picture galleries of Spenser. Murillo filled the margin of his schoolbooks with drawings. Le Brun, in the beginning of childhood, drew with a piece of charcoal on the walls of the house.—Pleasures, &c., of Literature, 12mo, Lond. 1851,

pp. 27, 28.

"In its distinctive and appropriate sense, the term genius is applied to mind only when under the direction of its individual tendencies, and when those are so strong or clear as to concentrate all its powers upon the production of new, or at least independent results; and that whether manifested in the regions of art or science. Bacon, Descartes, and Newton, were no less men of genius, than Michael Angelo, Raphael, Shakespeare, and Scott, although the work they GENIUS-

performed and the means they employed were different."—Moffat, Study of Æsthetics, p. 203, Cincinnati, 1856.

Sharp, Dissertation on Genius, Lond. 1755; Duff, Essays on Original Genius, Lond. 1767; Gerard, Essay on Genius, Lond. 1774; Lælius and Hortensia; or Thoughts on the Nature and Objects of Taste and Genius, Edin. 1782; Beattie, Dissertations, Of Imagination, ch. 3, 4to, Lond. 1783.

Genius and Talent .- "Genius is that mode of intellectual power which moves in alliance with the genial nature; i.e., with the capacities of pleasure and pain; whereas talent has no vestige of such an alliance, and is perfectly independent of all human sensibilities. Consequently, genius is a voice or breathing that represents the total nature of man, and therefore, his enjoying and suffering nature, as well as his knowing and distinguishing nature; whilst, on the contrary, talent represents only a single function of that nature. Genius is the language which interprets the synthesis of the human spirit with the human intellect, each acting through the other; whilst talent speaks only of insulated intellect. And hence also it is that, besides its relation to suffering and enjoyment, genius always implies a deeper relation to virtue and vice; whereas talent has no shadow of a relation to moral qualities any more than it has to vital sensibilities. A man of the highest talent is often obtuse and below the ordinary standard of men in his feelings; but no man of qenius can unyoke himself from the society of moral perceptions that are brighter, and sensibilities that are more tremulous, than those of men in general."—De Quincey, Sketches, Crit. and Biograph., p. 275. -V. TALENT.

Genius, Wit, and Humour (have been considered by many as words of equivalent signification. There is, however, a real difference between them. They) are all the offspring of imagination, but a much greater share of it is requisite to constitute true genius than either of the other two. Genius is characterized by a copious and plastic, as well as a vivid and extensive imagination; by which means it is equally qualified to invent and create, or to conceive and describe in the most lively manner the objects it contemplates. On the other hand, wit and humour neither invent nor create; they neither possess the vigour, the compass, nor the plastic power of the other

### GENIUS and TALENT-

quality. Their province is to assemble with alertness those sentiments and images which may excite pleasantry or ridicule. Wit is the most shining, Humour is the most pleasing and the most useful quality. Wit discovers itself in smart repartees, in ingenious conceits, in fanciful allusions, and in brilliant sentiments. Humour, on the other hand, manifests itself in ludicrous representations, in masterly strokes of manners and character, in shrewd observations, and in facetions argumentation and narrative. This quality may be divided into two kinds,-into that which is displayed in the representation of characters, and may be denominated Humour of character; and into that which is displayed in composition, and may be called Humour in writing. The first consists in the art of marking the follics, the foibles, or the oddities of the character exhibited so strongly, and exposing them in such a ludicrous light, as to excite pleasantry and laughter. Humour in writing consists either of random strokes of ridicule and facetiousness, occasionally thrown out, as subjects of drollery and pleasantry happen to occur; or of a vein of irony and delicate satire, purposely displayed on a particular subject."-Essay on Original Genius, 8vo, Lond. 1767.

# GENUINE.—V. AUTHENTIC.

GENUS is "a predicable which is considered as the material part of the species of which it is affirmed."—Whately, Log., bk. ii. ch. 5, sec. 3. It is either summum or subalternum, that is, having no genus above it, as being, or having another genus above it, as quadruped; proximum or remotum, when nothing intervenes between it and the species, as animal in respect of man, or when something intervenes, as animal in respect of a crow, for between it and crow, brute and bird intervene. A genus physicum is part of the species, as animal in respect of man, who has an animal body and a rational soul. A genus metaphysicum is identified adequately with the species and distinguished from it extrinsically, as animal in respect of brnte, colour in respect of blackness in ink. Logically the genus contains the species; whereas metaphysically the species contains the genus; e.g., we divide logically the genus man into European, Asiatic, &c., but each of the species, European, &c., contains the idea of man, together with the characteristic difference.

GENUS-

In modern classification, *genus* signifies "a distinct but subordinate group, which gives its name as a prefix to that of all the species of which it is composed."

GNOME (γνώμη), a weighty or memorable saying.

GOD, in Anglo-Saxon, means good.

One of names of the Supreme Being. The corresponding terms in Latin (Deus) and in Greek ( $\Theta sos$ ) were applied to natures superior to the human nature. With us, God always refers to the Supreme Being.

That department of knowledge which treats of the being,

perfections, and government of God, is theology,—q.v.

"The true and genuine idea of *God* in general, is this—a perfect conscious understanding being (or mind) existing of itself from eternity, and the cause of all other things."—Cudworth, *Intell. Syst.*, bk. i. ch. 4, sec. 4.

"The true and proper idea of God, in its most contracted form, is this—a being absolutely perfect; for this is that alone to which necessary existence is essential, and of which it is demonstrable."—Ibid, sec. 8.

"I define God thus—an essence or being, fully and absolutely perfect. I say fully and absolutely perfect, in contradistinction to such perfection as is not full and absolute, but the perfection of this or that species or kind of finite beings, suppose a lion, horse, or tree. But to be fully and absolutely perfect, is to be, at least, as perfect as the apprehension of a man can conceive without a contradiction."—H. More, Antidote against Atheism, ch. 2.

GOOD (The Chief).—An inquiry into the chief good, or the summum bonum, is an inquiry into what constitutes the perfection of human nature and the happiness of the human condition. This has been the aim of all religion and philosophy. The answers given to the question have been many. [Aristotle's discussion of it, v. Ethics, bk. i.] Varro enumerated 288; August., De Civit., lib. 19, cap. 1. But they may easily be reduced to a few. The ends aimed at by human action, how various soever they may seem, may all be reduced to three, viz., pleasure, interest, and duty. What conduces to these ends we call good, and seek after; what is contrary to these ends we call evil, and shun. But the highest of these ends is duty, and the chief good of man lies in the discharge of

GOOD (The Chief)—

duty. By doing so he perfects his nature, and may at the same time enjoy the highest happiness.

"Semita eerte Tranquillæ per virtutem patet unica vitæ." Juvenal, lib. iv. sat. 10.

Cicero, De Finibus Bonorum et Malorum; L'Abbe Anselme, Sur le Souverain bien des anciens, Mem. d. l'Acad. des. Inscript., et Belles Lettres, 1 ser. tom. v.—Jouffroy, Miscell.—V. Bonum (Summum).

GRAMMAR (Universal).—This word grammar comes to us from the Greeks, who included under τέχνη γεαμματιστική the art of writing and reading letters. But "grammar," says B. Johnson (English Grammar, ch. 1), "is the art of true and well speaking a language; the writing is but an accident." Language is the expression of thought—thought is the operation of mind, and hence language may be studied as a help to psychology.—Reid, Intell. Pow., essay i. ch. 5.

Thought assumes the form of ideas or of judgments, that is, the object of thought is either simply apprehended or conceived of, or something is affirmed concerning it. Ideas are expressed in words, judgments by propositions; so that as ideas are the elements of judgments, words are the elements

of propositions.

Every judgment involves the idea of a substance, of which some quality is affirmed or denied—so that language must have the substantive or noun, the adjective or quality, and the verb connecting or disconnecting. If the objects of our thoughts existed or were contemplated singly, these parts of speech would be sufficient. But the relation between objects, and the connection between propositions, render other parts of speech necessary. It is because we have ideas that are general, and ideas that are individual, that we have also nouns common and proper; and it is because we have ideas of unity and plurality, that we have numbers, singular, dual, and plural. Tenses and moods arise from dividing duration, and viewing things as conditional or positive. Even the order or construction of language is to be traced to the calm or impassioned state of mind from which it proceeds.

In confirmation of the connection thus indicated between grammar and psychology, it may be noticed that those who

#### GRAMMAR-

have done much for the one have also improved the other. Plato has given his views of language in the *Cratylus*, and Aristotle, in his *Interpretation* and *Analytics*, has laid the foundations of general grammar. And so in later times the most successful cultivators of mental philosophy have also been attentive to the theory of language.

In Greek, the same word (λόγος) means reason and language. And in Latin, reasoning is called *discursus*—a meaning which is made English by our great poet when he speaks of "large discourse of reason." In all this the connection between the powers of the mind and language is

recognized.

Montémont, Grammaire General ou Philosophie des Langues, 12 tom. 8vo, Paris, 1845; Beattie, Dissertations, Theory of Language, part ii. 4to, Lond. 1783; Monboddo, On the Origin and Progress of Language, 3 vols.

GRANDEUR.—"The emotion raised by grand objects is awful,

solemn, and serious."

"Of all objects of contemplation, the Supreme Being is the most grand. . . . The emotion which this grandest of all objects raises in the mind is what we call devotion—a serious recollected temper, which inspires magnanimity, and disposes to the most heroic acts of virtue.

"The emotion produced by other objects which may be called *grand*, though in an inferior degree, is, in its nature and in its effects, similar to that of devotion. It disposes to seriousness, elevates the mind above its usual state to a kind of enthusiasm, and inspires magnanimity, and a contempt of

what is mean. . . . .

"To me grandeur in objects seems nothing else but such a degree of excellence, in one kind or another, as merits our admiration."—Reid, Intell. Pow., essay viii. ch. 3.—V. Sublimity, Beauty, Æsthetics.

GRATITUDE is one of the affections which have been designated benevolent. It implies a sense of kindness done or intended, and a desire to return it. It is sometimes also characterized as a moral affection, because the party cherishing it has the idea that he who did or intended kindness to him has done right and deserves a return; just as the party who has received an injury has not merely a sense or feeling of the

#### GRATITUDE—

wrong done, but a sense of injustice in the doing of it, and the feeling or conviction that he who did it deserves punishment.

See Chalmers, Sketches of Mental and Moral Philosophy, ch.

8; Shaftesbury, Moralists, part. iii. sec. 2.

GYMNOSOPHIST (γυμνός, naked; σοφος, wise).—"Among the Indians, be certain philosophers, whom they call gymnosophists, who from sun rising to the setting thereof are able to endure all the day long, looking full against the sun, without winking or once moving their eyes."—Holland, Pliny, bk. vii. ch. 2.

The Brahmins, although their religion and philosophy were but little known to the ancients, are alluded to by Cicero.—*Tuscul.*, lib. v. cap. 27; Arrian, *Exped. Alexand.*, lib. vii. cap. 1.

Colebrooke and others in modern times have explained the

Indian philosophy.

HABIT (ἔξις, habitus).—" Habit, or state, is a constitution, frame, or disposition of parts, by which everything is fitted to act or suffer in a certain way."—Monboddo, Ancient Metaphys., ch.
4. By Aristotle ἔξις is defined (Metaph., lib. iv. cap. 20) to be, in one sense, the same with διαθεσις, or disposition. His commentators make a distinction, and say ἔξις is more permanent. There is the same distinction in English between habit and disposition.

Habits have been distinguished into natural and supernatural, or acquired and infused. Natural habits are those acquired by repetition. Supernatural habits are such as are infused at once. They correspond to gifts or graces, and the

consideration of them belongs to theology.

Acquired habits are distinguished into intellectual and moral. From habit results power or virtue, and the intellectual habits or virtues are intellect, wisdom, prudence, science, and art. "These may be subservient to quite contrary purposes, and those who have them may exercise them spontaneously and agreeably in producing directly contrary

#### HABIT-

effects. But the moral virtues, like the different habits of the body, are determined by their nature to one specific operation. Thus, a man in health acts and moves in a manner conformable to his healthy state of body, and never otherwise, when his motions are natural and voluntary; and in the same manner the habits of justice or temperance uniformly determine those adorned by them to act justly and temperately."—Aristotle, Ethic., lib. v. cap. 1.

Habits have been distinguished as active or passive. The determinations of the will, efforts of attention, and the use of our bodily organs, give birth to active habits; the acts of the memory and the affections of the sensibility, to passive habits. Aristotle (Ethic., lib. iii.) proves that our habits are voluntary, as being created by a series of voluntary actions. "But, it may be asked, does it depend merely on our own will to correct and reform our bad habits? It certainly does not; neither does it depend on the will of a patient, who has despised the advice of a physician, to recover that health which has been lost by profligacy. When we have thrown a stone we cannot restrain its flight; but it depended entirely on ourselves whether we should throw it or not."

Actions, according to Aristotle, are voluntary throughout; habits only as to their beginnings.

Thurot (De l'Entendement, tom. i. p. 138) calls "habit the memory of the organs, or that which gives memory to the organs."

Several precepts can be given for the wise regulation of the exercises of the mind in the formation of habits. We shall enumerate a few of them.

"The first is, that we should, from the very commencement, be on our guard against tasks of too difficult or too easy a nature; for, if too great a burden be imposed, in the diffident temper you will check the buoyancy of hope, in the self-confident temper you will excite an opinion whereby it will promise itself more than it can accomplish, the consequence of which will be sloth. But in both dispositions it will happen that the trial will not answer the expectation, a circumstance which always depresses and confounds the mind. But if the task be of too trivial a kind, there will be a serious loss on the total progress.

### HABIT-

"The second is, that in order to the exercise of any faculty for the acquirement of habit, two particular times should be carefully observed: the one when the mind is best disposed, the other, when worst disposed to the matter; so that, by the former, we may make most progress on our way; by the latter, we may, by laborious effort, wear out the knots and obstructions of the mind, by which means the intermediate times shall pass on easily and smoothly.

"The third precept is that of which Aristotle makes incidental mention :- 'That we should, with all our strength (yet not running into a faulty excess), struggle to the opposite of that to which we are by nature the most inclined;' as when we row against the current, or bend into an opposite direction a

crooked staff, in order to straighten it.

"The fourth precept depends on a general law, of undoubted truth, namely, that the mind is led on to anything more successfully and agreeably, if that at which we aim be not the chief object in the agent's design, but is accomplished, as it were, by doing something else; since the bias of our nature is such, that it usually dislikes constraint and rigorous authority. There are several other rules which may be given with advantage on the government of habit; for habit, if wisely and skilfully formed, becomes truly a second nature (as the common saying is); but unskilfully and unmethodically directed, it will be, as it were, the ape of nature, which imitates nothing to the life, but only clumsily and awkwardly."

Bacon, On Advancement of Learning, bk. vii., translated in Moffet's Selections, Dubl. 1847; Maine de Biran, L'Influence de Habitude; Dutrochet, Theorie de l'Habitude; M. F. Ravaisson, De l'Habitude; Butler's Analogy, i. 5; Reid, Active Powers, essay iii. 1, 3; Intell. Powers, essay iv. 4. [That virtue is a

habit of the soul, Aristotle, Ethics, ii. 5.]

HALLUCINATION .- [A delusion, consequent either on temporary confusion of mind, or on more enduring disorder of thought, originated and continued by a diseased condition of brain.-Ed.]

HAPPINESS-"is not, I think, the most appropriate term for a state, the perfection of which consists in the exclusion of all

hap, that is, chance.

"Felicity in its proper sense, is but another word for for-

## HAPPINESS-

tunateness, or happiness; and I can see no advantage in the improper use of words, when proper terms are to be found, but on the contrary, much mischief."—Coleridge, Aids to Reflection, vol. i. pp. 31-32.

The Greeks called the sum total of the pleasure which is allotted or happens to a man "vτυχία, that is, good hap; or, more religiously, ἔνδαιμονία, that is, favourable providence.—

Ibid.

To live well and to act well is synonymous with being

happy.—Aristotle, Ethic., lib. i. cap. 4.

Happiness is never desired but for its own sake only. Honour, pleasure, intelligence, and every virtue are desirable on their own account, but they are also desirable as means towards happiness. But happiness is never desired as a means, because it is complete and all-sufficient in itself.

"Happiness is the object of human action in its most general form, as including all other objects, and approved by reason. As pleasure is the aim of mere desire, and interest the aim of prudence, so happiness is the aim of wisdom. Happiness is conceived as necessarily an ultimate object of action. To be happy, includes or supersedes all other gratifications. If we are happy, we do not miss that which we have not; f we are not happy, we want something more, whatever we have. The desire of happiness is the supreme desire. All other desires of pleasure, wealth, power, fame, are included in this, and are subordinate to it. We may make other objects our ultimate objects; but we can do so only by identifying them with this. Happiness is our being's end and aim.

"Since happiness is necessarily the supreme object of our desires, and duty the supreme rule of our actions, there can be no harmony in our being, except our happiness coincide with our duty. That which we contemplate as the ultimate and universal object of desire, must be identical with that which we contemplate as the ultimate and supreme guide of our intentions. As moral beings, our happiness must be found in our moral progress, and in the consequences of our moral progress we must be happy by being virtuous."—Whewell,

Morality, Nos. 544, 545.

See Aristotle, Ethic., lib. i.; Harris, Dialogue on Happiness.

—V. Good (Chief), Perfection.

HARMONY (Pre-established).—When an impression is made on a bodily organ by an external object, the mind becomes percipient. When a volition is framed by the will, the bodily organs are ready to execute it. How is this brought about? The doctrine of a pre-established harmony has reference to this

question, and may be thus stated.

Before creating the mind and the body of man, God had a perfect knowledge of all possible minds and of all possible bodies. Among this infinite variety of minds and bodies, it was impossible but that there should come together a mind the sequence of whose ideas and volitions should correspond with the movements of some body: for in an infinite number of possible minds and possible bodies, every combination or union was possible. Let us, then, suppose a mind, the order and succession of whose modifications corresponded with the series of movements to take place in some body, God would unite the two and make of them a living soul, a man. Here, then, is the most perfect harmony between the two parts of which man is composed. There is no commerce nor communication, no action and reaction. The mind is an independent force which passes from one volition or perception to another in conformity with its own nature; and would have done so although the body had not existed. The body, in like manner, by virtue of its own inherent force, and by the single impression of external objects, goes through a series of movements; and would have done so although it had not been united to a rational soul. But the movements of the body and the modifications of the mind correspond to each other. In short, the mind is a spiritual automaton, and the body is a material automaton. Like two pieces of clock-work, they are so regulated as to mark the same time; but the spring which moves the one is not the spring which moves the other; yet they go exactly together. The harmony between them existed before the mind was united to the body. Hence this is called the doctrine of pre-established harmony.

It may be called correspondence or parallelism, but not harmony between mind and body—for there is no unity superior to both, and containing both, which is the cause of their mutual penetration. In decomposing human personality into two substances,\* from eternity abandoned each to

<sup>\*</sup> Soul and body, however, constitute one suppositum or person.

# HARMONY-

its proper impulse, which acknowledges no superior law in man to direct and control them, liberty is destroyed.—Tiberghien, Essai des Cannais. Hum., p. 394.

The doctrine of pre-established harmony differs from that of occasional causes "only in this respect, that by the former the accordance of the mental and the bodily phenomena was supposed to be pre-arranged, once for all, by the Divine Power, while by the latter their harmony was supposed to be brought about by His constant interposition."—V. Causes (Occasional).

This doctrine was first advocated by Leibnitz in his Theodicée and Monadologie.

Wolfius, Psycologia Rationalis, sec. 614-617, &c.

HARMONY (of the Spheres).—The ancient philosophers supposed that the regular movements of the heavenly bodies throughout space formed a kind of harmony, which they called the harmony of the spheres.

"Look how the floor of heaven Is thick inlaid with patines of bright gold; There's not the smallest orb which thou behold'st But in his motion like an angel sings, Still quiring to the young-eyed cherubim: Such harmony is in immortal souls; But, whilst this muddy vesture of decay Doth grossly close it in, we cannot hear it."

Merchant of Venice, Act v. sc. i.

HATE—[Revulsion of feeling against things and persons, regarded as evil. As concerned with persons, it takes the form of antagonism, and is to be ranked among the Affections.— Ed.]

HEDONISM (ἡδονή, pleasure), is the doctrine that the chief good of man lies in the pursuit of pleasure. This was the doctrine of Aristippus and the Cyrenaic school; hence called ἡδονικοί.

HERMETIC BOOKS.—A collection of treatises ascribed to the Egyptian Thoth or Taant, and also to the Hermes or Mercury of the Greeks. Different opinions have been entertained as to their origin and author. Marsilius Ficinus has collected the quotations made from the Hermetic Books scattered throughout the writings of the Platonicians and early Christians; of which he published a Latin translation in 1471. They are a miscellany of theosophy, astrology, and

# HERMETIC BOOKS-

alchemy—partly Egyptian, partly Greek, and partly Jewish and Christian.—Lenglet du Fresnoy, Hist. de la Philosoph.

Hermetique, 3 tom. 12mo, Paris, 1742.

HETERONOMY—[ἐτερος, another; νόμος, law. This is Kant's designation for a false principle of morals, such as receives acknowledgment when personal desire determines the right for us, instead of moral law. In contrast with Heteronomy, the recognition of moral law as the absolute law of life is Autonomy of the Will, or Autonomy of the Reason.—Kritik der Practischen Vernunft. Metaph. of Ethics, Semple's Trans., new ed.; Calderwood, p. 93.—Ed.]

HEURISTIC.—V. OSTENSIVE.

HOLINESS suggests the idea, not of perfect virtue, but of that peculiar affection wherewith a being of perfect virtue regards moral evil; and so much indeed is this the precise and characteristic import of the term, that, had there been no evil either actual or conceivable in the universe, there would have been no holiness. There would have been perfect truth and perfect righteousness, yet not holiness; for this is a word which denotes neither any one of the virtues in particular, nor the assemblage of them all put together, but the recoil or the repulsion of these towards the opposite vices—a recoil that never would have been felt, if vice had been so far a nonentity as to be neither an object of real existence nor an object of thought."—Chalmers, Nat. Theol., vol. ii. p. 380.

HOMOLOGUE (ὁμός, same; λόγος).—"A homologue is defined as
the same organ in different animals, under every variety of form and function. Thus, the arms and feet of man, the fore and hind feet of quadrupeds, the wings and feet of birds, and the fins of fishes, are said to be homologous."—M'Cosh,

Typical Forms, p. 25.

"The corresponding parts in different animals are called homologues, a term first applied in anatomy by the philosophers of Germany: and this term Mr. Owen adopts to the exclusion of terms more loosely denoting identity or similarity."—Whewell, Supplem., vol. p. 142.

See Owen, On the Archetype and Homologies of the Verte-

brate Skeleton, 1848.—V. ANALOGUE.

HOMONYMOUS.—V. EQUIVOCAL.

HOMOTYPE (ὁμός, same; τύπος, type).—"The corresponding or serially repeated parts in the same animal are called homotypes. Thus, the fingers and toes of man, indeed the fore and hind limbs of vertebrate animals generally, are said to be homotypal."—M'Cosh, Typical Forms, p. 25.

HUMOUR (humor, moisture).—As the state of the mind is influenced by the state of the fluids of the body, humour has come to be used as synonymous with temper and disposition. But temper and disposition denote a more settled frame of mind than that denoted by the word humour. It is a variable mood of the temper or disposition. A man who is naturally of a good temper or kind disposition may occasionally be in bad humour.—V. WIT.

HYLOZOISM (ὅλη, matter; and ζωή, life).—The doctrine that life and matter are inseparable. This doctrine had been held under different forms. Straton of Lampsacus held that the ultimate particles of matter were each and all of them possessed of life. The Stoics, on the other hand, while they did not accord activity or life to every distinct particle of matter, held that the universe, as a whole, was a being animated by a principle which gave to it motion, form, and life. This doctrine appeared among the followers of Plotinus, who held that the soul of the universe animated the least particle of matter. Spinoza asserted that all things were alive in different degrees. Omnia quamvis diversis gradibus animata tamen sunt.

Under all these forms of the doctrine there is a confounding of life with force. Matter, according to Leibnitz and Boscovich, and others, is always endowed with force. Even the vis inertiae ascribed to it is a force. Attraction and repulsion, and chemical affinity, all indicate activity in matter; but life is a force always connected with organization, which much of matter wants. Spontaneous motion, growth, nutrition, separation of parts, generation, are phenomena which indicate the presence of life; which is obviously not coextensive with matter.

HYPOSTASIS.—V. SUBSISTENTIA.

HYPOTHESIS (ὖπόθεσις, suppositis, supposition).—In Logic, Aristotle gave the name θέσις to every proposition which, without being an anxiom, served as the basis of demonstration, and did not require to be demonstrated itself. He distinguished two kinds of thesis, the one which expressed the

## HYPOTHESIS-

essence of a thing, and the other which expressed its existence or non-existence. The first is the ignorphic or definition—the

second, the ὑποθεσις.

When a phenomenon that is new to us cannot be explained by any known cause, we are uneasy and try to reconcile it to unity by assigning it ad interim to some cause which may appear to explain it. Before framing an hypothesis, we must see first that the phenomenon really exists. Prove ghosts before explaining them. Put the question an sit? before eur sit? Second, that the phenomenon cannot be explained by any known cause. When the necessity of an hypothesis has been admitted, a good hypothesis—First, should contain nothing contradictory between its own constituent parts or The Wernerians suppose water other established truths. once to have held in solution bodies which it cannot now dissolve. The Huttonians ascribe no effect to fire but what it can now produce. Second, it should fully explain the phenomenon. The Copernican system is more satisfactory than that of Tycho Brahe. Third, it should simply explain the phenomenon, that is, should not depend upon any other hypothesis to help it out. The Copernican system is more simple. It needs only gravitation to carry it out-that of Tycho Brahe depends on several things.

By hypothesis is now understood the supposing of something, the existence of which is not proved, as a cause to explain phenomena which have been observed. It thus differs in signification from theory, which explains phenomena by causes which are known to exist and to operate. "Hypothesis," says Dr. Gregory (Lectures on Duties and Qualifications of a Physician), "is commonly confounded with theory; but a hypothesis properly means the supposition of a principle, of whose existence there is no proof from experience, but which may be rendered more or less probable by facts which are neither numerous enough nor adequate to infer its existence."

"In some instances, says Boscovich (De Solis ac Lunæ Defectibus, Lond. 1776, pp. 211, 212), "observations and experiments at once reveal to us all we know. In other cases, we avail ourselves of the aid of hypothesis; by which word, however, is to be understood, not fictions altogether arbitrary, but suppositions comformable to experience or analogy." "This,"

#### HYPOTHESIS-

says Dr. Brown, "is the right use of hypothesis—not to supersede, but to direct investigation—not as telling us what we are to believe, but as pointing out to us what we are to ascertain." And it has been said (Pursuit of Knowledge, vol. ii. p. 255, weekly vol. No. 31), that "the history of all discoveries that have been arrived at, by what can with any propriety be called philosophical investigation and induction, attests the necessity of the experimenter proceeding in the institution and management of his experiments upon a previous idea of the truth to be evolved. This previous idea is what is properly called an hypothesis, which means something placed under as a foundation or platform on which to institute and carry on the process of investigation."

Different opinions have been held as to the use of hypotheses in philosophy. The sum of the matter seems to be, that hypotheses are admissible and may be useful as a means of stimulating, extending, and directing inquiry. But they ought not to be hastily framed, nor fondly upheld in the absence of support from facts. They are not to be set up as barriers or stopping places in the path of knowledge, but as way-posts to guide us in the road of observation, and to cheer us with the prospect of speedily arriving at a resting place—at another stage in our journey towards truth. They are to be given only as provisional explanations of the phenomena, and are to be cheerfully abandoned the moment that a more full and satisfactory explanation presents itself.—Reid, Intell. Powers, essay i. ch. 3; Bacon, Nov. Org., i. ch. 104; Leibnitz, Nov. Ess., 4, ch. 12; Whewell's Nov. Org. Renov. ii. ch. 4 and 5,

# I.—V. Ego, Subject.

IDEA (idea, ilidos, forma, species, image).--[This word has gone through such a variety of meanings, that it is possible to deal with it only by giving in succession the more important of them. 1. Descartes used the word to designate both an impression made upon the brain and also but more commonly a mental representation of an object,—"All that is in our mind when we conceive a thing." 2."Whatsoever is the object of the understanding when a man thinks."—Locke. 3. A mental

image or representation of an external object. 4.A notion of the understanding. 5. The pattern according to which all created things were made by the Deity,—the eternal reality of which visible things are only the shadows.—Plato. 6. "Pure conceptions of the reason,"\*—à priori conceptions,—transcendental ideas—(God, soul,—the universe),—essentially different from the forms of the sensory and the categories of the understanding. These ideas, as given by pure reason, are only regulative, guiding our intellectual procedure. As given by the practical reason, they are more than regulative, and represent the really existing.—Kant. 7. The absolute,—"Truth in itself and for itself,"-the universal and one, of which the manifold is only a dim representation,—to which all things tend in process of dialectic evolution;—and of which Logic is the science.—Hegel.—Ed.] "Plato agreed with the rest of the ancient philosophers in this—that all things consist of matter and form; and that the matter of which all things were made, existed from eternity, without form; but he likewise believed that there are eternal forms of all possible things which exist, without matter; and to those eternal and immaterial forms he gave the name of ideas.

"In the Platonic sense, then, *ideas* were the patterns according to which the Deity fashioned the phenomenal or ectypal world."—Sir William Hamilton.

The word is used in this sense by Milton when he says,--

"God saw his works were good, Answering his fair idea."

And by Spenser in the following passage:-

"What time this world's great workmaister did cast,
To make all things such as we now behold,
It seems that He before his eyes had plast
A goodly patterne, to whose perfect mould
He fashioned them as comely as he could,
That now so fair and seemly they appear,
As naught may be amended anywhere.
That wondrons patterne, wheresoe'er it be,
Whether in earth, laid up in seeret store,
Or else in heaven, that no man may it see
With sinful eyes, for fear it to deflore,

Is perfect beauty."

We are accustomed to say that an artificer contemplating

<sup>\*</sup> According to Kant, reason is the faculty which furnishes us with the principles of knowledge  $\grave{a}$  priori.—Ed.

## IDEA—

the idea of anything, as of a chair or bed, makes a chair or bed. But he does not make the idea of them. "These forms of things," said Cicero (Orat., cap. 3), "Plato called ideas, and denied that they were born, but were always contained in reason and intelligence."—Heusde, Init. Philosoph. Platon.,

tom. ii. pars 3.

"Idea is a bodiless substance, which of itself hath no subsistence, but giveth form and figure to shapeless matter, and becometh the cause that bringeth them into show and evidence. Socrates and Plato supposed that there be substances separate and distinct from matter, howbeit subsisting in the thoughts and imagination of God, that is to say, of mind and understanding. Aristotle admitted verily these forms and ideas, howbeit not separate from matter, as being patterns of all that God hath made. The Stoics, such at least as were of the school of Zeno, have delivered that our thoughts and conceits are the ideas."—Plutarch, Opinions of Philosophers, ch. 10, fol. 666 of the translation by Holland.

Ideæ sunt, principales formæ quædam, vel rationes rerum stabiles, atque incommutabiles, que ipse formate non sunt, ac per hoc æternæ ac semper eodem modo sese habentes, quæ in divina intelligentia continentur: et cum ipsæ neque oriantur, neque intereant; secundum eas tamen formari dicitur, quicquid oriri et interire potest, et omne quod oritur et interit."-Augustine, lib. lxxxiii. 99, 46.

> "Tu cuncta superno Ducis ab exemplo, pulchrum pulcherimus ipse Mundum mente gerens, similique imagine formans."-Boeth., De Consol., 9.

Tiberghien (Essai des Connais. Hum., p. 207) has said,— "Seneca considered ideas, according to Plato, as the eternal exemplars of things, Cicero as their form, Diogenes Laertius as their cause and principal, Aristotle as substances; and in the Middle Ages and in our day they are general notions, in opposition to particular or individual notions. The ideas of Plato embrace all these meanings. The terms which he employs are idea and eldos to designate the Divine image, the ideal model or type (τύπος) of all things and beings. He also calls them παραδείγματα, αἰτίαι ἀρχαί, to denote that these eternal exemplars are the principle and cause of the existence

#### IDEA.

and development of all that is in nature. They are also the thoughts of God (νόηματα), who has produced all things according to the type of these *ideas*. And the terms ἔναδες, μοναδες, indicate the affinity between the theory of Plato and the numbers of Pythagoras."

In another passage (Essai des Connais. Hum., pp. 33, 34) the same author has said, that, "according to the Platonic sense, adopted by Kant and Cousin, ideas are as it were the essence and matter of our intelligence. They are not, as such, a product or result of intelligence, they are its primitive elements, and at the same time the immediate object of its activity. . . . . They are the primary anticipations which the mind brings to all its cognitions, the principles and laws by reason of which it conceives of beings and things. The mind does not create ideas, it creates by means of ideas. .... There are two great classes of ideas—1. Those which are related in some sense to experience; as the principles of mathematics, notions of figure, magnitude, extension, number, time, and space. 2. Those which are completely independent of all sensible representation, as the ideas of good and evil, just and unjust, true or false, fair or deformed."—p. 208.—V. NOTION.

According to Plato, ideas were the only objects of science or true knowledge. Things created being in a state of continual flux, there can be no real knowledge with respect to them. But the divine ideas being eternal and unchangeable, are objects of science properly so called. According to Aristotle and the Peripatetics, knowledge, instead of originating or consisting in the contemplation of the eternal ideas, types, or forms, according to which all things were created and originated, consisted in the contemplation of the things created, and in the thoughts and the operations of the mind to which that contemplation gives rise. But as external things cannot themselves be in the mind, they are made known to it by means of species, images, or phantasms (q. r.); so that, in perception we are not directly cognizant of the object, but only of a representation of it. In like manner, in imagination, memory, and the operations of the intellect, what is directly present to the mind, is not the real object of thought, but a represention of it.

Instead of employing the various terms, image, species, phantasm, &c., of the Peripatetic philosophy, Descartes adopted the term idea, which till his time had been all but exclusively employed in its Platonic sense.

By Descartes and subsequent philosophers the term *idea* was employed to signify all our mental representations, all the notions which the mind frames of things. And this, in contradistinction to the Platonic, may be called the modern use of the word. Mr. Locke, for example, who uses the word *idea* so frequently as to think it necessary to make an apology for doing so, says—" It is the term which, I think, serves best to stand for whatsoever is the object of the understanding, when a man thinks: I have used it to express whatever is meant by *phantasm*, *notion*, *species*, or whatever it is which the mind can be employed about in thinking."

Against this modern use of the word *idea*, more especially in reference to the doctrine of *perception* (q.v.), Dr. Reid most vehemently protested.—" Modern philosophers,' said he (*Intell. Pow.*, essay i. ch. 1), "as well as the Peripatetics and Epicureans of old, have conceived that external objects cannot be the immediate objects of our thoughts; that there must be some image of them in the mind itself, in which, as in a mirror, they are seen. And the name *idea*, in the philosophical sense of it, is given to those internal and immediate objects of our thoughts. The external thing is the remote or mediate object; but the *idea*, or image of that object in the mind, is the immediate object, without which we would have no perception, no remembrance, no conception of the mediate object.

"When, therefore, in common language, we speak of having an idea of anything, we mean no more by that expression than thinking of it. The vulgar allow that this expression implies a mind that thinks, an act of that mind which we call thinking, and an object about which we think. But besides these three, the philosopher conceives that there is a fourth; to wit, the idea which is the immediate object. The idea is in the mind itself, and can have no existence but in a mind that thinks; but the remote or mediate object may be something external, as the sun or moon; it may be something past or future; it may be something which never existed.

This is the philosophical meaning of the word *idea*; and we may observe that this meaning of the word is built upon a philosophical opinion; for if philosophers had not believed that there are such immediate objects of all our thoughts in the mind, they would never have used the word *idea* to

express them.

"I shall only add that, although I may have occasion to use the word *idea* in this philosophical sense in explaining the opinions of others, I shall have no occasion to use it in expressing my own, because I believe *ideas*, taken in this sense, to be a mere fiction of philosophers. And in the popular meaning of the word, there is the less occasion to use it, because the English words *thought*, *notion*, *apprehension*, answer the purpose as well as the Greek word *idea*; with this advantage, that they are less ambiguous."

Now it may be doubted whether in this passage Dr. Reid has correctly understood and explained the meaning of the word *idea* as employed by all modern philosophers, from the

time of Descartes.

Dr. Reid takes idea to mean something interposed between the mind and the object of its thought-a tertium quid, or a quartum quid, an independent entity different from the mind and from the object thought of. Now this has been the opinion both of ancient and modern philosophers; but it is not the opinion of all. There are many, especially among modern philosophers, who, by the idea of a thing, mean the thing itself in the mind as an object of thought. Even when the object thought of is represented to the mind, the representation is a modification of the mind itself, and the act of representing and the act of knowing the object thought of, are one and the same; the representation and cognition are indivisible. But Dr. Reid does not admit that any of our knowledge is representative. He had such a horror of the doctrine of ideas as meaning something interposed between the mind and the objects of its knowledge, that he calls all our knowledge immediate. Thus he speaks of an immediate knowledge of things past, and of an immediate knowledge of things future. Now all knowledge is present knowledge, that is, it is only knowledge when we have it. But all knowledge is not immediate knowledge. Things that are

past are not actually present to the mind when we remember them. Things that are future are not actually present when we anticipate them, for they have as yet no actual existence. But the mind frames to itself a representation of these things as they have been, or as they will be, and in thus representing them has knowledge of them. This knowledge, however, cannot be called immediate. In memory there is the faculty, and there is the object of the faculty or the thing remembered. But the object or the thing remembered is not actually present to the faculty. It is reproduced or represented, and in representing the object to the faculty we have knowledge of it as a past reality. Memory, therefore, may be called a representative faculty. Now, in perception, where the object of the faculty is also present, it may not be necessary for the mind to frame to itself any representation or image of the external reality. The faculty and its object are in direct contact, and the knowledge or perception is the immediate result. This is the doctrine of Dr. Reid, and if he had acknowledged the distinction, he might have called perception a presentative faculty, as memory is a representative faculty.\* According to other philosophers, however, there is a representation even in perception. The external reality is not in the mind. The mind merely frames to itself a representation or image of what the external reality is, and in this way has knowledge of it. But this representation or image is not something interposed or different from the mind and the external object. It is a modification of the mind itself. It is the external object in the mind as an object of thought. It is the idea of the external reality. This is a theory of perception which Dr. Reid did not clearly distinguish; but it is at variance with his own, and, if he had distinctly apprehended it, he would have condemned it. In like manner he would have condemned the use of the word idea to denote a representative image, even although that representation was held to be merely a modification of mind. But this is the sense in which the term idea. is used by Descartes, and other philosophers, in reference to the doctrine of perception. In a general sense it means any-

<sup>\*</sup> See Reid's Works, edited by Sir William Hamilton; Note B, Of Presentative and Representative Knowledge: and Note c, Of the Various Theories of External Perception.

thing present to the mind, whether really or representatively, as an object of thought.

Ideas, regarded according to the nature and diversity of their objects, are sensible, intellectual, or moral; according to the essential characters of these objects, they are necessary and absolute, or contingent and relative; according to the aspect in which they represent things, they are simple or compound, abstract or concrete, individual or general, partitive or collective; according to their origin or formation, they are adventitious, factitious, or innate; according to their quality or fidelity, they are true or false, real or imaginary, clear or obscure, distinct or confused, complete or incomplete, adequate or inadequate.—Leibnitz, Nouveaux Essais, bk. ii. ch. 22. "Definition being merely an enumeration of the parts of a compound idea, a simple idea cannot be defined."—Pirie, On Hum. Mind, p. 268.

As to the origin of our *ideas*, the opinions of metaphysicians may be divided into three classes.—1. Those who deny the senses to be anything more than instruments conveying objects to the mind, perception being active (Plato and others). 2. Those who attribute all our *ideas* to sense (Hobbes, Gassendi, Condillac, the ancient Sophists). 3. Those who admit that the earliest notions proceed from the senses, yet maintain that they are not adequate to produce the whole knowledge possessed by the human understanding (Aristotle, Locke).—Dr. Mill, Essays, 314, 321.—V. Innate.

See Trendlenburg, De Ideis Platonis; Richter, De Ideis Platonis; Sir William Hamilton, Discussions on Philosophy; Reid's Works; Dugald Stewart, Philosoph. Essays, App. ii.; Adam Smith, Essays on Philosoph. Subjects, p. 119, note.

IDEAL.—[That which the mind contemplates as a representation of the normal excellence of any form of being, or of what ought to be, in contrast with what exists.—Ed.] "Though ideas are widely separated from sensible reality, there is something, if possible, still more widely separated, and that is the ideal. A few examples will enable you to comprehend the difference between ideas and the ideal: Perfection is an idea; humanity in all its perfection is an ideal; human virtue and wisdom in all their purity are ideas; the wisdom of the Stoics is an ideal. The ideal, then, is the intellectual existence of a thing which

#### IDEAL—

has no other characters than those determined by the idea itself. The idea, thus individualized, so to speak, serves as the rule of our actions; it is a model, which we may approach in a greater or lesser degree, but from which we are nevertheless infinitely distant. We compare, for example, our conduct with the dictates of the monitor, that exists within us. We all judge and correct ourselves with reference to this ideal, without the power of ever attaining to its perfection. These ideas, though destitute of any objective reality, cannot be regarded as purely chimerical. They furnish a unit of measure to the reason, which requires a conception of what is perfect in each kind, in order to appreciate and measure the various degrees of imperfection. But would you realize the ideal in experience as the hero of a romance? It is impossible, and is, besides, a senseless and useless enterprise; for the imperfection of our nature, which ever belies the perfection of the idea, renders all illusion impossible, and makes the good itself, as contemplated in the idea, resemble a fiction."—Henderson, The Philosophy of Kant, p. 119.

"By ideal I understand the idea, not in concreto but in individuo, as an individual thing, determinable or determined by the idea alone. What I have termed an ideal, was in Plato's philosophy an idea of the Divine mind—an individual object present to its pure intuition, the most perfect of every kind of possible beings, and the archetype of all phenomenal existences."—Meiklejohn, Translation of Kant's Crit. of Pure

Reason, p. 351.

"We call attention," says Cousin (On the Beautiful), "to two words which continually recur in this discussion—they are, on the one hand, nature or experience; on the other, ideal. Experience is individual or collective; but the collective is resolved into the individual; the ideal is opposed to the individual and to collectiveness: it appears as an original conception of the mind. Nature or experience gives me the occasion for conceiving the ideal, but the ideal is something entirely different from experience or nature; so that, if we apply it to natural, or even to artificial figures, they cannot fill up the condition of the ideal conception, and we are obliged to imagine them exact. The word ideal corresponds to an absolute and independent idea, and not to a collective one."

"L'ideal voilà l'echelle mysterieuse qui fait monter l'ame du fini, a l'infini."—Cousin, Du Vrai, du Beau, et du Bien,

9me. lecon, p. 189.

When the word *ideal* is used as a noun and qualified by the adjective *beau*, its sense is critical or æsthetic, and has reference to the fine arts, especially to statuary and painting. "The common notion of the *ideal* as exemplified more especially in the painting of the last century, degrades it into a mere abstraction. It was assumed that to raise an object into an *ideal*, you must get rid of everything individual about it. Whereas the true *ideal* is the individual freed from everything that is not individual in it, with all its parts pervaded, and animated, and harmonized by the spirit of life which flows from the centre."—Guesses at Truth, 2d ser. p. 218.

The *ideal* is to be attained by selecting and assembling in one whole the beauties and perfections which are usually seen in different individuals, excluding everything defective or unseemly, so as to form a type or model of the species. Thus, the Apollo Belvedere is the *ideal* of the beauty and proportion of the human frame; the Farnese Hercules is the type of manly strength. The *ideal* can only be attained by following nature. There must be no elements nor combinations but such as nature exhibits; but the elements of beauty and perfection must be disengaged from individuals, and embodied in one faultless whole. This is the empirical account of the *ideal*.

According to Cicero (Orator., cap. 2, 3), there is nothing of any kind so fair that there may not be a fairer conceived by the mind. We can conceive of statues more perfect than those of Phidias. Nor did the artist, when he made the statue of Jupiter or Minerva, contemplate any one individual from which to take a likeness; but there was in his mind a form of beauty, gazing on which, he guided his hand and skill in imitation of it." In the philosophy of Plato this form was called  $\pi \alpha \rho \dot{\alpha} \delta \epsilon_{ij} \gamma \mu \alpha$ . Seneca (Epist. lviii. sec. 15-18) takes the distinction between  $i \delta \dot{\epsilon} \alpha$  and  $\epsilon i \delta o \varepsilon$ , thus:—when a painter paints a likeness, the original is his  $i \delta \dot{\epsilon} \alpha$ —the likeness is the  $\epsilon i \delta o \varepsilon$  or image. The  $\epsilon i \delta o \varepsilon$  is in the work—the  $i \delta \dot{\epsilon} \alpha$  is out of the work and before the work. This distinction is commended by Heusde, Init. Phil. Plat., vol. ii. pars. 3, p.

105). And he refers to Cicero (De Invent., ii. 1). Who states that Zeuxis had five of the most beautiful women of Crotona, as models, from which to make up his picture of a perfect beauty, as illustrating the Platonic sense of παράδειγμα or the ideal. According to this view the beau ideal is a type of hypothetical perfection contemplated by the mind, but which may never have been realized, how nearly soever it may have been approached in the shape of an actual specimen.

IDEAL LEGALITY.—[Kant's phrase to designate the form of moral law as simple or direct command,—"Thou shalt." Its formula is,—Act from a maxim at all times fit for law universal.—Ed.]

IDEALISM is the doctrine that in external perceptions the objects immediately known are ideas. It has been held under various forms.—See Sir W. Hamilton, Reid's Works, note c; Berkeley, Works; Sir W. Drummond, Academic Questions; Reid, Inquiry.

Some of the phases of modern idealism among the Germans may be seen in the following passage from Lewes, Biograph. Hist. of Phil., vol. iv. p. 209:—"I see a tree. The common psychologists tell me that there are three things implied in this one fact of vision, viz.: a tree, an image of that tree, and a mind which apprehends that image. Fichte tells me that it is I alone who exist. The tree and the image of it are one thing, and that is a modification of my mind. This is subjective idealism. Schelling tells me that both the tree and my ego (or self) are existences equally real or ideal; but they are nothing less than manifestations of the absolute, the infinite, or unconditioned. This is objective idealism. Hegel tells me that all these explanations are false. only thing really existing (in this one fact of vision) is the idea, the relation. The ego and the tree are but two terms of the relation, and owe their reality to it. This is absolute idealism. According to this there is neither mind nor matter, heaven nor earth, God nor man. The only real existences are certain ideas or relations. Everything else that has name or being derives its name and being from its constituting one or other of the two related terms, subject and object; but the only thing that is true or real is the identity of their contradiction, that is, the relation itself."

#### IDEALISM—

The doctrine opposed to idealism is realism—q. v. See also Perception.

IDEALIST.—"In England, the word *idealist* is most commonly restricted to such as (with Berkeley) reject the existence of a material world. Of late its meaning has been sometimes extended (particularly since the publications of Reid) to all those who retain the theory of Descartes and Locke, concerning the immediate objects of our perceptions and thoughts, whether they admit or reject the consequences deduced from this theory by the Berkeleian. In the present state of the science, it would contribute much to the distinctness of our reasonings were it to be used in this last sense exclusively."—Stewart, Dissert., part ii. 166, note.

IDEATION and IDEATIONAL.—"The term sensation has a double meaning. It signifies not only an individual sensation, as, when I say, I smell this rose, or I look at my hand; but it also signifies the general faculty of sensation; that is, the complex notion of all the phenomena together, as a part of our nature."

"The word idea has only the meaning which corresponds to the first of these significations; it denotes an individual idea; and we have not a name for that complex notion which embraces, as one whole, all the different phenomena to which the term idea relates. As we say sensation, we might also say ideation; it would be a very useful word; and there is no objection to it, except the pedantic habit of decrying a new term. Sensation would, in that case, be the general name for one part of our constitution; ideation for another."

Quoting this from Mr. James Mill as his authority, Dr. Carpenter (*Princip. of Hum. Phys.*, p. 546), has introduced the adjective *ideational* to express a state of consciousness which is excited by a sensation through the instrumentality of the sensorium.

"The basement convolutions of the cerebrum are the central organs of the perceptive consciousness, the portals to intellectual action, where sensory impressions, the intuitions of the special senses, whether sights, sounds, tastes, smells, or feelings become idealized and registered; that is, perceived, remembered, and associated; and where, too, the ideation of outward individualities is effected. . . . Ideation is the

#### IDEATION-

first step in the intellectual progress of man. Ideas are the pabula of thought, and form equally a constituent element in the composite nature of our animal propensities, and of our emotional and moral feelings. Ideation is as essential to the very existence of memory, as memory is to the operation of thought. For what, in reality, is memory but the fact of retained idealized impressions in the mind? And without these retained idealizations, embodied in the memory as representative ideas, where are the materials of thought? and how are the processes of thought to be effected?"—Journal of Phychol. Med., Jan. 1857, pp. 139, 144.

IDENTICAL PROPOSITION.—" It is Locke, I believe, who introduced, or at least gave currency to the expression identical proposition, in philosophic language. It signifies a judgment, a proposition, in which an idea is affirmed by itself, or in which we affirm of a thing what we already know of it."—Cousin, Hist. of Mod. Philosoph., lect. xxiv.; Locke, Essay on Hum. Understand., bk. iv. ch. 8, sec. 3.

We must distinguish between analytic and tautologous judgments. Whilst the analytic display the meaning of the subject, and put the same matter in a new form, the tautologous only repeat the subject, and give us the same matter, in the same form, as, "Whatever is, is."—Thomson, Outline of Laws of Thought, p. 196.

A proposition is called *identical* whenever the attribute is contained in the subject, so that the subject cannot be conceived as not containing the attribute. Thus, when you say a body is solid, I say that you make an *identical proposition*, because it is impossible to have the idea of body without that of solidity. When propositions unfold the same thought, but in different language, they are called equivalent—God is Almighty—Deity can do all things.

IDENTISM (idem, the same), the identity of thought and being. The doctrine of absolute identity, teaches that the two elements of thought, objective and subjective, are absolutely one; that matter and mind are opposite poles of the same infinite substance; and that creation and the Creator are one. This is the philosophy of Schelling. It coincides ultimately with Pantheism.

<sup>&</sup>quot;If the doctrine of identity means anything, it means that

#### IDENTISM-

thought and being are essentially one; that the process of *thinking* is virtually the same as the process of *creating*; that in constructing the universe by logical deduction, we do virtually the same thing as Deity accomplished in developing himself in all the forms and regions of creation; that every man's reason, therefore, is really God; in fine, that Deity is the whole sum of consciousness immanent in the world."—Morell, *Hist. of Phil.*, vol. ii. p. 127.

through all changes of experience. As the knowledge of Personality is given in consciousness, that of Personal Identity is secured by the aid of memory.—Ed.] "What is called personal identity, is our being the same persons from the commencement to the end of life; while the matter of the body, the dispositions, habits, and thoughts of the mind, are continually changing. We feel and know that we are the same. This notion or persuasion of personal identity results from memory. If a man loses all recollection of his early life, he continues, nevertheless, actually the same person."—Taylor, Elements of Thought.

Dr. Brown (lect. xi.) changes the phrase personal identity into mental identity. Locke says (Essay on Hum. Understand., bk. ii. ch. 27)—"To find wherein personal identity consists we must consider what person stands for; which, I think, is a thinking intelligent being, that has reason and reflection, and can consider itself as itself, the same thinking thing in

different times and places."

This looks like confining personal identity to the mind. But Leibnitz (Theodicée, p. 172) called it a "metaphysical communication by which soul and body make up one suppositum, which we call a person." In a Review of the Doctrine of Personal Identity, p. 73, 8vo, London, 1827, it has been proposed to define it as "the continuation of the same organization of animal life in a human creature possessing an intelligent mind, that is, one endowed with the ordinary faculties of reason and memory, without reference to the original formation or constitution of that mind, whether it be material or immaterial, or whether it survives or perishes with the body. Or, more shortly, it may be said personal identity consists in the same thinking intelligent substance united to

#### IDENTITY-

the same human body. By the same human body, however, is not meant the same particles of matter, but of the same human structure and form."—V. Personality.

Locke makes personal identity consist in consciousness. "Consciousness is inseparable from thinking; and since it is so, and is that which makes every one to be what he calls self, and thereby distinguishes himself from all other thinking beings, in this alone consists personal identity, i.e., the sameness of a rational being. And as far as this consciousness can be extended backwards to any past action or thought, so far reaches the identity of that person."—Essay on Hum. Understand., bk ii. ch. 27.

But it has been remarked that "Consciousness, without any regard to a sameness of the thinking intelligent substance, cannot constitute personal identity. For, then, a disordered imagination might make one man become two, or even twenty persons, whose actions he should imagine himself to have performed. And if a man forgets and loses all consciousness of having done certain actions, he will then not be the same person who did them."—Whitehead, On Materialism, p. 79.

Consciousness merely ascertains or indicates personal identity, but does not constitute it. Consciousness presupposes personal identity as knowledge presupposes truth.

See Butler, Dissertation on Personal Identity; Reid, Intell. Pow., essay iii. ch. 6, with note; Stewart, Elements, part ii. ch. 1, sec. 2.

is what it is, and not another. So that it amounts to the same as the principle of contradiction. In Logic it is expressed thus—conceptions which agree can be in thought united, or affirmed of the same subject at the same time. A is A, or A=A.

IDEOLOGY or IDEALOGY.—The analysis of the human mind by Destutt de Tracy, published about the end of last century, was entitled "Elemens d'Ideologie," and the word has come to be applied to the philosophy of the sensational school, or the followers of Condillac—as Cabanis, Garat, and Volney. Of this school, De Tracy is the metaphysician; Cabanis (Rapports du Physique et de Moral de l'Homme) is the physiologist; and Volney (Catechism du Citoyen Francais) is the moralist. The followers of this school were leading members of the

# IDEOLOGY or IDEALOGY-

Academie des Sciences Morales et Politiques, and also took an active share in political assemblies. Their doctrines and movements were contrary to the views of Napoleon, who showed his dislike by suppressing the Academie des Sciences Morales et Politiques. But the members of the school kept up their doctrines and their meetings, and it was on the motion of De Tracy that the Senate decreed the abdication of the emperor in 1814.—Damiron, Hist. de Philosoph. en France au 19 siecle.

"For Locke and his whole school, the study of the understanding is the study of ideas; hence the recent and celebrated expression *ideology*, to designate the science of the human understanding. The source of this expression is in the *Essay on the Hum. Understanding*, and the ideological school is the natural offspring of Locke."—Cousin, *Hist. of Mod. Philosoph.*, lect. xvi.

By a double blunder in philosophy and Greek, ideologic (for idealogic), a word which could only properly suggest an à priori scheme, deducing our knowledge from the intellect, has in France become the name peculiarly distinctive of that philosophy of mind which exclusively derives our knowledge from sensation."—Sir W. Hamilton, Edin. Rev., Oct. 1830, p. 112.

Destutt de Tracy has distinguished Condillac by the title of the father of ideology."—Stewart, Philosoph. Essays, essay iii.

IDIOSYNCRASY (1800), proprius; our, con, and zeāsis, mixtio), means a peculiar temperament of mind or of body. "The soul in its first and pure nature hath no idiosyncrasies, that is, hath no proper natural inclinations, which are not competent to others of the same kind and condition."—Glanvill, Pre-existence of Souls, ch. 10. It is seen, however, that different persons "of the same kind and condition" may soon manifest different inclinations—which if not natural are partly so, and are traced to some peculiarity in their temperament, as well as to the effect of circumstances.

Mr. Stewart, in the conclusion of part second of his *Elements*, says he uses temperament as synonymous with *idiosyncrasy*.—
V. TEMPERAMENT.

IDOL (εἴδωλον, from εἶδος, an image).—Something set up in place of the true and the real. Hence Lord Bacon (De Augment.

#### IDOL-

Scient., lib. iv. cap. 5) calls those false appearances by which men are led into error, idols. "I do find, therefore, in this enchanted glass four idols, or false appearances, of several distinct sorts, every sort comprehending many subdivisions: the first sort I call idols of the nation or tribe; the second, idols of the den or cave; the third, idols of the forum; and the fourth, idols of the theatre."—De Interpretatione Nature, sec. 39; Reid, Intell. Pow., essay iv. ch. 8.—V. PREJUDICE.

**IGNORANCE**—[ignorantia, want of knowledge.] In morals and jurisprudence it may respect the law or the action, and is distinguished into ignorantia juris, and ignorantia facti.

Ignorantia facti excusat. Ignorance of what is done excuses, as, when a contract is signed under a wrong impression as to the meaning of the terms, such contract is voidable.

Ignorantia juris quod quisque tenetur scire neminem excusat. Every man is supposed to know the laws of the land in which he lives; and if he transgress any of them, although in ignorance, he is not excused. A merchant continuing to deal in goods which have been declared contraband is liable to the penalty, though he did not know the law.

In respect of an action, ignorance is called efficacious or concomitant, according as the removal\* of it would, or would not, prevent the action from being done. In respect of the agent, ignorance is said to be vincible or invincible, according as it can, or cannot, be removed by the use of accessible means of knowledge.

Vincible ignorance is distinguished into affected or wilful, by which the means of knowing are perversely rejected; and supine or crass, by which the means of knowing are indolently

or stupidly neglected.

Ignorance is said to be invincible in two ways—in itself, and also in its cause, as when a man knows not what he does, through disease of body or of mind; in itself, but not in its cause, as when a man knows not what he does, through intoxication or passion.

ILLATION (illatum, from infero, to bring in), or "inference, consists in nothing but the perception of the connection there is

<sup>\*</sup> Aristotle (*Ethic.*, lib. iii. cap. 1) takes a difference between an action done *through ignorance* ( $\delta\iota\dot{\alpha}\ \check{\alpha}\gamma\nu\iota\alpha\nu$ ), and an action done *ignorantly* ( $\check{\alpha}\gamma\nu\acute{\alpha}\nu\nu$ ). In the former case the ignorance is the direct cause of the action, in the latter case it is an accident or concomitant.

# ILLATION-

between the *ideas* in each step of the deduction, whereby the mind comes to see either the certain agreement or disagreement of any two *ideas*, as in demonstration, in which it arrives at knowledge; or their probable connection on which it withholds its assent, as in opinion."—Locke, *Essay on Hum. Understand.*, bk. iv. ch. 17.—V. Inference, Induction.

intellectual attainment and culture.] The name given to a secret society said to exist in Germany and other countries of Europe, towards the close of the last century. They professed the purest principles of virtue; but their real design was to subvert all religion and all government. Doubts have been entertained as to the extent and influence of any such society; and some have even denied its existence.—Robison, Proofs of a Conspiracy, &c.

ILLUSION.—[A deceptive representation of an object, occasioned

by organic or functional disorder.]

IMAGINATION.—[The faculty of representation by which the mind keeps before it an image of visible forms. This power operates either as simply reproductive, or as in some sense creative.—Ed.] "Nihil aliud est imaginari quam rei corporeæ figuram seu imaginem contemplari."—Descartes, Medit. Secunda.

Mr. Addison says (Spectator, No. 411), "The pleasures of imagination are such as arise from visible objects, since it is the sense of sight that furnishes the imagination with its ideas." Dr. Reid says, "Imagination, in its proper sense, signifies a lively eonception of objects of sight. It is distinguished from conception, as a part from a whole." But a much wider signification has been given to the word by others.

"By imagination we mean, in a comprehensive sense, that operation of the mind by which it—(1) receives, (2) retains, (3) recalls, and (4) combines, according to higher laws the ideal images furnished to it by the canesthesis and by the senses; for all these acts are manifestly links of one chain. At the first step, we usually call this operation\* the faculty of con-

<sup>\* &</sup>quot;It would be well, if instead of speaking of the powers of the mind (which causes a misunderstanding), we adhere to the designation of the several operations of one mind; which most psychologists recommend, but in the sequel forget."

## IMAGINATION-

ception; at the second, memory; at the third, reproductive fancy; and at the fourth, productive fancy."—Feuchtersleben,

Med. Psychol., p. 120, 8vo, 1847.

"In the language of modern philosophy, the word imagination seems to denote—first, the power of apprehending or conceiving ideas, simply as they are in themselves, without any view to their reality; secondly, the power of combining into new forms or assemblages, those thoughts, ideas, or notions, which we have derived from experience or from information. These two powers, though distinguishable, are not essentially different."—Beattie, Dissert., Of Imagination, ch. 1.

"Imagination as reproductive, stores the mind with ideal images, constructed through the medium of attention and memory, out of our immediate perceptions. These images, when laid up in the mind, form types with which we can compare any new phenomena we meet with, and which help us to begin the important work of reducing our experience to

some appreciable degree of unity.

"To understand the nature of productive or creative imagination, we must suppose the reproductive process to be already in full operation, that is, we must suppose a number of ideas to be already formed and stored up within the mind. . . . . They may now be combined together so as to form new images, which, though composed of the elements given in the original representations, yet are now purely mental creations of our own. Thus, I may have an image of a rock in my mind, and another image of a diamond. I combine these two together and create the purely ideal representation of a diamond rock."—Morell, Psychol., pp. 175, 176, 8vo, Lond. 1853.

"A man has imagination in proportion as he can distinctly copy in idea the impressions of sense; it is the faculty which images within the mind the phenomena of sensation. A man has fancy in proportion as he can call up, connect, or associate at pleasure, these internal images ( $\varphi \alpha \nu \tau \dot{\alpha} \zeta \omega$ , is to cause to appear) so as to complete ideal representations of absent objects. Imagination is the power of depicting, and fancy, of evoking or combining. The imagination is formed by patient observation; the fancy, by a voluntary activity in shifting

# IMAGINATION-

the scenery of the mind. The more accurate the *imagination*, the more safely may a painter, or a poet, undertake a delineation or description, without the presence of the objects to be characterized. The more versatile the *fancy*, the more original and striking will be the decorations produced."—Taylor, *Synonyms*.

Sir W. Hamilton says (*Metaphysics*, lect. xlv.), Imagination is not *productive* or *creative*, but merely *plastic*.

Wordsworth (Pref. to his Works, vol. i. 12mo, Lond. 1836) finds fault with the foregoing discrimination, and says, "It is not easy to find how imagination thus explained, differs from distinct remembrance of images; or fancy, from quick and vivid recollection of them: each is nothing more than a mode of memory." According to Wordsworth, "imagination, in the sense of the poet, has no reference to images that are merely a faithful copy, existing in the mind, of absent external objects; but is a word of higher import, denoting operations of the mind upon these objects, and processes of creation or composition governed by fixed laws."

"It is the divine attribute of the *imagination*, that it is irrepressible, unconfinable; that when the real world is shut out, it can create a world for itself, and with a necromantic power, can conjure up glorious shapes and forms, and brilliant visions to make solitude populous, and irradiate the gloom of the dungeon."—W. Irving, Sketch Book.

"And as imagination bodies forth
The form of things unknown, the poet's pen
Turns them to shapes, and gives to nothing
A local habitation and a name."

To imagine in this high and true sense of the word, is to realize the ideal, to make intelligible truths descend into the forms of sensible nature, to represent the invisible by the visible, the infinite by the finite. In this view of it, imagination may be regarded as the differentia of man—the distinctive mark which separates him a grege mutorum. That the inferior animals have memory, and what has been called passive imagination, is proved by the fact that they dream—and that in this state the sensions impressions made on them during their waking hours, are reproduced. But they show no trace of that higher faculty or function which transcends

# IMAGINATION-

the sphere of sense, and which out of elements supplied by things seen and temporal, can create new objects, the contemplation of which lifts us to the infinite and the unseen, and gives us thoughts which wander through eternity. High art is highly metaphysicial, and whether it be in poetry or music, in painting or in sculpture, the triumph of the artist lies not in presenting us with an exact transcript of things that may be seen, or heard, or handled in the world around us, but in carrying us across the gulf which separates the phenomenal from the real, and placing us in the presence of the truely beautiful, and surrounding us with an atmosphere more pure than that which the sun enlightens.

IMAGINATION and CONCEPTION.—" The business of conception," says Mr. Stewart (Elements, ch. 3), "is to present us with an exact transcript of what we have felt or perceived. But we have, moreover, a power of modifying our conceptions, by combining the parts of different ones together, so as to form new wholes of our own creation. I shall employ the word imagination to express this power, and I apprehend that this is the proper sense of the word; if imagination be the power which gives birth to the productions of the poet and the painter. This is not a simple faculty of the mind. It presupposes abstraction to separate from each other qualities and circumstances which have been perceived in conjunction; and also judgment and taste to direct us in forming the combinations." And he adds (ch. 6), "The operations of imagination are by no means confined to the materials which conception furnishes, but may be equally employed about all the subjects of our knowledge."—V. Conception, Fancy.

IMAGINATION and MEMORY.—" Memory retains and recalls the past in the form which it assumed when it was previously before the mind. Imagination brings up the past in new shapes and combinations. Both of them are reflective of objects; but the one may be compared to the mirror which reflects whatever has been before it, in its proper form and colour; the other may be likened to the kaleidoscope which reflects what is before it in an infinite variety of new forms and dispositions."—M'Cosh, Typical Forms, p. 450.

"Music when soft voices die Vibrates in the memory

# IMAGINATION and MEMORY-

Odours, when sweet violets sicken, Live within the sense they quicken."—Shelley.

See Hunt, Imagination and Fancy; Wordsworth, Pref. to Lyrical Ballads; Edin. Review for April 1842, article on Moore's Poems; Akenside, Pleasurcs of Imagination.

IMITATION (imitor, quasi mimitor, from μιμέομαι. Vossius.)—
[The act of copying, or writing according to a model.] "is a facultie to expresse livelie and perfitelie that example, which ye go about to follow."—Ascham, The Schulemaster, bk. ii.

As a social and improvable being, man has been endowed with a propensity to do as he sees others do. This propensity manifests itself in the first instance spontaneously or instinctively. Children try to follow the gestures and movements of others, before their muscles are ready to obey, and to imitate sounds which they hear, before their voice is able to do so. Mr. Stewart has made a distinction (Elements, vol. iii. ch. 2) between the propensity and the power of imitation. Both are peculiarly strong and lively in children, and answer the most important purposes. But the propensity to imitate what others do, and the manner of doing it, continues throughout life, and requires to be carefully watched and properly directed.

Man not only imitates his fellow-creatures, but tries to copy nature in all her departments. In the fine arts he imitates the forms which strike and please him. And the germ of some of the highest discoveries in science has been found in attempts to copy the movements and processes of nature.—

Reid, Act. Powers, essay iii. part i. ch. 2.

IMMANENCE—[indwelling, in contrast with transcending]. "Immanence implies the unity of the intelligent principle in creation, in the creation itself, and of course includes in it every genuine form of pantheism. Transcendence implies the existence of a separate divine intelligence, and of another and spiritual state of being, intended to perfectionate our own."—J. D. Morell, Manchester Papers, No. 2, pp. 108–9.

IMMANENT (immaneo, to remain in), means that which does not pass out of a certain subject or certain limits. "Logicians distinguish two kinds of operations of the mind; the first kind produces no effect without the mind, the last does. The first they call immanent acts; the second transitive. All

#### IMMANENT-

intellectual operations belong to the first class; they produce no effect upon any external object."—Reid, *Intell. Pow.*, essay ii. ch. 14.

"Even some voluntary acts, as attention, deliberation, purpose, are also immanent."—Correspondence of Dr. Reid, p. 81.

"Conceiving, as well as projecting or resolving, are what the schoolmen called *immanent* acts of the mind, which produce nothing beyond themselves. But painting is a *transitive* act, which produces an effect distinct from the operation, and this effect is the picture."—Reid, *Intell. Pow.*, essay iv. ch. 1.

The logical sense assigned to this word by Kant, is somewhat different. According to him we make an *immanent* and valid use of the forms of the understanding, when we conceive of the matter furnished by the senses, according to our notions of time and space. But when we try to lift ourselves above experience and phenomena, and to conceive of things as they are in themselves, we are making a transcendent and illegitimate use of our faculties.

Theologians say, God the Father generated the Son by an immanent act, but he created the world by a transient act.

The doctrine of Spinoza (*Ethic.*, pars i. Pref. 18) is, *Deus est omnium rerum causa immanens*, non vero transiens,—that is, all that exists, exists in God; and there is no difference in substance between the universe and God.

"We are deceived, when, judging the infinite essence by our narrow selves, we ascribe intellections, volitions, decrees, purposes, and such like immanent actions to that nature which hath nothing in common with us, as being infinitely above us."—Glanvill, Vanity of Dogmatizing, ed. 1661, p. 101.

IMMATERIALISM is the doctrine of [attributed to] Bishop Berkeley, that there is no material substance, and that all being may be reduced to mind, and ideas in a mind.

Swift, in a letter to Lord Carteret, of date 3d September 1724, speaking of Berkeley, says, "Going to England very young, about thirteen years ago, he became founder of a sect there, called the *immaterialists*, by the force of a very curious book upon that subject."

"In the early part of his own life, he (Dr. Reid) informs us that he was actually a convert to the scheme of

#### IMMATERIALISM—

immaterialism; a scheme which he probably considered as of a perfectly inoffensive tendency, so long as he conceived the existence of the material world to be the only point in dispute."—Reid, *Intell. Pow.*, essay ii. ch. 10.

[To attribute to Berkeley a denial of the existence of matter is hardly warranted, though there is much to favour it. He does say that "the existence of external bodies wants proof," and that "the supposition of external bodies is not necessary for the producing of our ideas." But his point was to show that "the philosophical notion of matter involves a contradiction." "He wanted to induce men to settle what the substantial existence of the sensible world could in reason amount to."—Fraser, Life of Berkeley, 365. "Berkeley's philosophy in its most comprehensive aspect is a philosophy of the causation that is in the universe, rather than a philosophy of the mere material world."—Ib. 366.—Ed.]

IMMATERIALITY is predicated of mind, to denote that as a substance it is different from matter. Spirituality is the positive expression of the same idea. The materiality of the soul was maintained by Tertullian, Arnobius, and others, during the three first centuries. At the end of the fourth, the immateriality of the soul was professed by Augustine, Nemesius, and Mamertus Claudianus.—Guizot, Hist. of Civiliz., vol. i. p. 394.

IMMEDIATE—[direct. "Immediate Knowledge" is knowledge of the thing itself, in contrast with knowledge of one thing by the intervention of another.—German, *Unmittelbar*.—Ed.]

IMMORTALITY (OF THE SOUL) is one of the doctrines of natural religion. [It rests upon the basis that] the soul is distinct from the body, and is not affected by the dissolution of the body. How long, or in what state it may survive after the death of the body, is not intimated by the term immortality. But the arguments to prove that the soul survives the body, all go to favour the belief that it will live for ever.

See Plato, Phadon; Porteous, Sermons; Sherlock, On the Immortality of the Soul; Watson, Intimations of a Future State; Bakewell, Evidence of a Future State; Autenrieth, On Man, and his Hope of Immortality, Tübingen, 1815.

IMMUTABILLITY is the absence or impossibility of change. It is applied to the Supreme Being to denote that there can be

# IMMUTABILLITY-

no inconstancy in his character or government. It was argued for by the heathens. See Bishop Wilkins, Natural Religion.

in virtue of which the same portion of space cannot at the same time be occupied by more than one portion of matter. It is extension, or the quality of occupying space. A nail driven into a board does not penetrate the wood; it merely separates and displaces the particles. Things are penetrable, when two or more can exist in the same space—as two angels; impenetrable, when not—as two stones.

IMPERATE.—V. ELICIT, ACT.

**IMPERATIVE** (*imperativ*), that which contains a *should* or ought (*sollen*). It is the formula of the commandment (*gebot*) of reason. [This is the characteristic of moral law, distinguishing it from all law besides.]—Ed.

IMPERATIVE.—"The representation of an objective principle, so far as it necessitates the will, is called a commandment (of reason); and a formula expressing such is called an *imperative*. An *imperative* commands hypothetically or categorically. The former expresses that an action is necessary as a mean towards somewhat further; but the latter is such an *imperative* as represents an action to be in itself necessary and without regard had to anywhat out of and beyond it, *i.e.* objectively necessary. . . . When we attend to the dissimilar grades of necessitation expressed by the *imperative* they might be called (1) Rules of art, (2) Dictates of prudence, (3) Laws of morality. The first and second are hypothetical imperatives. The third involves the conception of an intermediate and objective and universally valid necessity."—Kant, *Groundwork of Metaphys. of Ethics*, ch. 2.

IMPERATIVE (CATEGORICAL, THE), is the phrase employed by Kant, to denote that the moral law is absolute and obligatory. The practical reason speaks to us in the categorical imperative, that is, in seeing an action to be right, we see, at the same time, that we ought to do it. And this sense of obligation springs from no view of the consequences of the action, as likely to be beneficial, but is a primitive and absolute idea of the reason; involving, according to Kant, the power to obey, or not to obey. We are under obligation, therefore we are free. Moral obligation implies freedom.

IMPOSSIBLE (THE), or that which cannot be, has been distinguished as the metaphysically or absolutely impossible, or that which implies a contradiction, as to make a square circle, or two straight lines to enclose a space; the physically impossible, the miraculous, or that which cannot be brought about by merely physical causes, or in accordance with the laws of nature, as the death of the soul; and the ethically impossible, or that which cannot be done without going against the dictates of right reason, or the enactments of law, or the feelings of propriety. That which is morally impossible, is that against the occurrence of which there is the highest probable evidence, as that the dice should turn up the same number a hundred successive times.—Whatley, Log., App. i.

"It may be as really impossible for a person in his senses, and without any motive urging him to it, to drink poison, as it is for him to prevent the effects of it after drinking it; but who sees not these impossibilities to be totally different in their foundation and meaning? or what good reason can there be against calling the one a moral and the other a natural impossibility?—Price, Review, ch. 10, p. 431.

IMPRESSION (imprimo, to press in, or on), is the term employed to denote the change on the nervous system arising from a communication between an external object and a bodily organ. It is obviously borrowed from the effect which one piece of matter which is hard has, if pressed upon another piece of matter which is softer; as the seal leaving its impression or configuration upon the wax. It is not intended, however, to convey any affirmation as to the nature of the change which is effected in the nervous system, or as to the nature of sensation; and still less to confound this preliminary change with the sensation itself. The term impression is also applied to the effects produced upon the higher sensibility, or our sentiments. Thus, we speak of moral impressions, religious impressions, impressions of sublimity and beauty.

Hume divided all modifications of mind into *impressions* and *ideas*. Ideas were *impressions* when first received; and became *ideas* when remembered and reflected on. See Reid, *Intell. Pow.*, essay i. chap. 1.

"Mr. Stewart (Elements, vol. iii., Addenda to vol. i. p. 43), seems to think that the word impression was first in-

## IMPRESSION-

troduced as a technical term, into the philosophy of mind, by Hume. This is not altogether correct; for, besides the instances which Mr. Stewart himself adduces, of the illustration attempted of the phenomena of memory from the analogy of an impress and a trace, words corresponding to impression were among the ancients familiarly applied to the processes of external perception, imagination, &c., in the Atomistic, the Platonic, the Aristotelian, and the Stoical philosophies; while among modern psychologists (as Descartes and Gassendi), the term was likewise in common use."—Sir Will. Hamilton, Reid's Works, p. 294, note.

Dr.Reid (Intell. Pow., essay ii.), distinguishes the impressions made on the organs of sense into mediate and immediate. The impressions made on the sense of touch are immediate, the external body and the organ being in contact. The impressions made on the ear by sounding bodies are mediate, requiring the air and the vibrations of the air to give the sensation of hearing. It may be questioned whether this distinction is well or deeply founded. See Dr. Young, Intell. Philosoph., p. 71;

Sir Will. Hamilton, Reid's Works, p. 104.

IMPULSE (impello, to drive on) [applies to every form of mental force which simply and directly urges to action].—It is used to denote the influence of appetite and passion as differing from the authority of reason and conscience. "It may happen, that when appetite draws one way, it may be opposed, not by any appetite or passion, but by some cool principle of action, which has authority without any impulsive force."—Reid, Act Pow., essay iii. p. ii. ch. 1.

"Passion often gives a violent *impulse* to the will, and makes a man do what he knows he shall repent as long as he

lives."—Ibid. chap. 6.

**IMPUTATION** (*imputo*, to ascribe, to charge), is a judgment by which a person is [charged with the doing of a wrong action].

INCLINATION (inclino, to lean towards), is a form or degree of natural desire. [Tendency of the nature towards an object]. It is synonymous with propensity or with the penchant of the French. It is more allied to affection than to appetite. "It does not appear that in things so intimately connected with the happiness of life, as marriage and the choice of an em-

## INCLINATION-

ployment, parents have any right to force the *inclinations* of their children."—Beattie, *Mor. Science*, vol. ii. part ii.—V. DISPOSITION, TENDENCY.

INDEFINITE (in and definitum, that which is not limited), means that, the limits of which are not determined, or at least not so determined as to be apprehended by us.—[Properly, want of clearness and exactness of discrimination in our thoughts. It does not apply to objects.—Ed.] The definite is that of which the form and limits are determined and apprehended by us. That of which we know not the limits, comes to be regarded as having none; and hence indefinite has been confounded with the infinite. But they ought to be carefully distinguished. The infinite is absolute; it is that of which we not only know not the limits, but which has and can have no limit. The indefinite is that of which there is no limit fixed [by us]. You can suppose it enlarged or diminished, but still it is finite.—V. Infinite.

Leibnitz, Discours de la Conformité de la Foi et de la Raison, sec. 70 : Descartes, Princip. Philosoph., pars 1, cap. 26 et 27.

INDIFFERENCE (Liberty of) is [meant to describe a] state of mind in which the will is not influenced or moved to choose or to refuse an object, but is equally ready to do either. It should rather be called liberty of indetermination, or that state in which the mind is when it has not determined to do one of two or more things. [There is no such state as volition irrespective of motive, and this phrase should be discarded. Liberty of indifference is no part of the libertarian or free-will doctrine.—Ed.]

INDIFFERENT.—An action is said [though inaccurately] to be indifferent, that is, neither right nor wrong, when, considered in itself or in specie. It is neither contrary nor conformable to any moral law or rule; as, to bow the head. Such an action may become right or wrong, when the end for which it is done is considered. It is then regarded in individuo; as, to bow the head, in token of respect, or in a temple, in token of adoration.

INDISCERNIBLES (Identity of).—It is a doctrine of the philosophy of Leibnitz, that no two things can be exactly alike. The difference between them is always more than a numerical difference. We may not always be able to discern it, but

INDISCERNIBLES (Identity of)—

still there is a difference. Two things radically indiscernible the one from the other, that is, having the same qualities, and of the same quantity, would not be two things, but one. For the qualities of a thing being its essence, perfect similitude would be identity. But Kant objected that two things perfectly alike, if they did not exist in the same place at the same time, would, by this numerical difference, be constituted different individuals.—Leibnitz, Nouveaux Essais, Avant-Propos.

"There is no such thing as two individuals indiscernible from each other. An ingenious gentleman of my acquaintance, discoursing with me, in the presence of Her Electoral Highness the Princess Sophia, in the garden of Herenhausen, thought he could find two leaves perfectly alike. The Princess defied him to do it, and he ran all over the garden a long time to look for some, but it was to no purpose. Two drops of water, or milk, viewed through a microscope, will appear distinguishable from each other.

"To suppose two things indiscernible, is to suppose the same thing under two names."—Leibnitz, Fourth Paper to Clarke, p. 95.

"From the principle of the sufficient reason I infer that there cannot be in nature two real beings absolutely indiscernible; because if there were, God and nature would act without reason, in treating the one differently from the other; and thus God does not produce two portions of matter perfectly equal and alike."—Leibnitz, Fifth Paper to Clarke.

INDIVIDUAL (from in and divido, to divide), was defined by Porphyry—Id cujus proprietates alteri simul convenire non possunt. [A being having a distinct, circumscribed existence.]

"An object which is, in the strict and primary sense, one, and cannot be logically divided, is called *individual*."—Whately, Log., b. ii. ch. 5, sec. 5.

An individual is not absolutely indivisible, but that which cannot be divided without losing its name and distinctive qualities, that which cannot be parted into several other things of the same nature, is an individual whole. A stone or a piece of metal may be separated into parts, each of which shall continue to have the same qualities as the whole. But

## INDIVIDUAL-

a plant or an animal when separated into parts loses its individuality. We do not ascribe individuality to brute matter. But what is that which distinguishes one organized being, or one living being, or one thinking being from all others! This is the question so much agitated by the schoolmen, concerning the principle of individuation. In their barbarous Latin it was called Hacecietas, that is, that in virtue of which we say this and not that; or Ecceietas, that of which we say lo! here, and not anywhere else. Peter, as an individual, possess many properties which are quiddative, or common to him with others, such as substantialitas, corporeietas, animalitas, Humanitas. But he has also a reality, which may be called Petreietas or Peterness, which marks all the others with a difference, and constitutes him Peter. It is the Hacecietas which constitutes the principle of individuation. It was divided into the extrinsic and intrinsic.

The number of properties which constituted an individuum extrinsceum, are enumerated in the following versicle:—

Forma, figura, locus, tempus, cum nomine, sanguis, Patria, sunt septem, quæ non habet unum et alter.

You may call Socrates a philosopher, bald, big-bellied, the son of Sophroniscus, an Athenian, the husband of Xantippe, &c., any one of which properties might belong to another man; but the congeries of all these is not to be found but in Socrates.

The intrinsic principle of individuation, is the ultimate reality of the being—ipsa rei entitas. In physical substances, the intrinsic principle of individuation is ipsa materia et forma cum unione.

Hutcheson has said (Metaphys., pars 1, ch. 3), "Si quaratur de causa cur res sit una, aut de Individuationis principio in re ipsa; non aliud assignandum, quam ipsa rei natura existens. Quaecunque enim causa rem quamlibet fecerat aut ercaverat, eam unam etiam fecerat, aut individuam, quo sensu volunt Metaphysici."

Leibnitz has a dissertation, De principio Individuationis, which has been thought to favour nominalism. Yet he maintained that individual substances have a real positive existence, independent of any thinking subject.

INDIVIDUALITY.—[Separateness of being which distinguishes

#### INDIVIDUALITY-

one person from another]. Like personal identity, it belongs properly to intelligent and responsible beings.

INDUCTION (Method or Process of) (ἐπαγωγή, inductio).—[That form of the reasoning process which proceeds from particulars to generals]. "It has been said that Aristotle attributed the discovery of induction to Socrates, deriving the word ἐπαγωγή from the Socratic accumulation of instances, serving as antecedents to establish the requisite conclusion."—Devey, Log., p. 151, note.

"Inductio est argumentum quo ex plurium singularium recensione aliquid universale concluditur."—Le Grand, Inst. Philosoph., p. 57, ed. 1675.

Inductio est argumentum quo probatur quid verum esse de quopiam generali, ex eo quod verum sit de particularibus omnibus, saltem de tot ut sit credibile.—Wallis, Inst. Log., p. 198, 4th ed.

Induction is a kind of argument which infers, respecting a whole class, what has been ascertained respecting one or more individuals of that class.—Whately, Log., bk. ii. ch. 5, sec. 5.

"Induction is that operation of mind by which we infer that what we know to be true in a particular case or cases, will be true in all cases which resemble the former in certain assignable respects. In other words, induction is the process by which we conclude that what is true of certain individuals of a class, is true of the whole class, or that what is true at certain times will be true under similar circumstances at all times."—Mill, Log., bk. iii. ch. 2, sec. 1.

"Induction is usually defined to be the process of drawing a general rule from a sufficient number of particular cases; deduction is the converse process of proving that some property belongs to the particular case from the consideration that it belongs to the whole class in which the case is found. That all bodies tend to fall towards the earth is a truth which we have obtained from examining a number of bodies coming under our notice, by induction; if from this general principle we argue that the stone we throw from our hand will show the same tendency, we adopt the deductive method. . . . . More exactly, we may define the inductive method as the process of discovering laws and rules from facts, and causes from effects; and the deductive, as the method of deriving

## INDUCTION-

facts from laws and effects from their causes."—Thomson, Outline of the Laws of Thought, 2d ed. pp. 321, 323.

According to Sir William Hamilton (Discussions, p. 156), "Induction has been employed to designate three very different operations-1. The objective process of investigating particular facts, as preparatory to induction, which is not a process of reasoning of any kind. 2. A material illation of the universal from the singular, as warranted either by the general analogy of nature, or the special presumptions afforded by the object-matter of any real science. 3. A formal illation of the universal from the individual, as legitimated solely by the laws of thought, and abstract from the conditions of this or that 'particular matter.' The second of these is the inductive method of Bacon, which proceeds by way of rejections and conclusions, so as to arrive at those axioms or general laws from which we infer by way of synthesis other particulars unknown to us, and perhaps placed beyond reach of direct examination. Aristotle's definition coincides with the third, and 'induction is an inference drawn from all the particulars' (Prior Analyt., ii. ch. 23). The second and third have been confounded. But the second is not a logical process at all, since the conclusion is not necessarily inferrible from the premiss, for the some of the antecedent does not necessarily legitimate the all of the conclusion, notwithstanding that the procedure may be warranted by the material problem of the science or the fundamental principles of the human understanding. The third alone is properly an induction of Logic; for Logic does not consider things, but the general forms of thought under which the mind conceives them; and the logical inference is not determined by any relation of casuality between the premiss and the conclusion, but by the subjective relation of reason and consequence as involved in the thought."

"The Baconian or Material Induction proceeds on the assumption of general laws in the relations of physical phenomena, and endeavours, by select observations and experiments, to detect the law in any particular case. This, whatever be its value as a general method of physical investigation, has no place in Formal Logic. The Aristotelian or Formal Induction proceeds on the assumption of general

## INDUCTION-

laws of thought, and inquires into the instances in which, by such laws, we are necessitated to reason from an accumulation of particular instances to an universal rule."—Mansel, *Prolegom. Log.*, p. 209.

On the difference between *induction* as known and practised by Aristotle, and as recommended by Lord Bacon, see

Stewart, Elements, part ii. ch. 4, sec. 2.

INDUCTION (Principle of).—By the principle of induction is meant the ground or warrant on which we conclude that what has happened in certain cases, which have been observed, will also happen in other cases, which have not been observed. This principle is involved in the words of the wise man, Eccles. i. 9, "The thing that hath been, it is that which shall be: and that which is done is that which shall be done." In nature there is nothing insulated. All things exist in consequence of a sufficient reason, all events occur according to the efficacy of proper causes. In the language of Newton, Effectuum naturalium ejusdem generis eædem sunt cause. The same causes produce the same effects. The principle of induction is an application of the principle of casuality. Phenomena have their proper causes, and these causes operate according to a fixed law. This law has been expressed by saying, substance is persistent. Our belief in the established order of nature is a primitive judgment, according to Dr. Reid and others, and the ground of all the knowledge we derive from experience. According to others this belief is a result or inference derived from experience. On the different views as to this point compare Mill's Log., bk. iii. ch. 3, with Whewell's Philosophy of Inductive Sciences, bk. i. ch. 6. Also, the Quarterly Review, vol. lxviii.

On the subject of induction in general, see Reid, Intell. Pow., essay vi. ch. 5; Inquiry, ch. vi. sec. 24; Stewart, Elements, vol. i. ch. 4, sec. 5; Philosoph. Essays, p. 74; Royer Collard, Œuvres de Reid, par Mons. Jouffroy, tom. iv. p. 277.

INERTIA.—Resistance to change of state. That property of matter by which it would always continue in the same state of rest or motion in which it was put, unless changed by some external force. The quantity of matter in a body is determined by its quantity of inertia; and this is estimated by the quantity of force required to put it in motion

#### INERTIA -

at a given rate. Kepler conceiving the disposition of a body to maintain its state of motion as indicating an exertion of power, prefixed the word vis to inertia. Leibnitz maintained that matter manifests force in maintaining its state of rest.

"The vis insita, or innate force of matter, is a power of resisting by which every body, as much as in it lies, endeavours to persevere in its present state, whether it be of rest or of moving uniformly forward in a straight line. This force is ever proportional to the body whose force it is; and differs nothing from the inactivity of the mass but in our manner of conceiving it. A body, from the inactivity of matter, is not without difficulty put out of its state of rest or motion. Upon which account this vis insita may, by a most significant name, be called vis inertiæ, or force of inactivity."—Newton, Princip., defin. 3.

IN ESSE; IN POSSE.—Things actually existing are said to be in esse; things that are not, but which may be, are said to be in posse.

INFERENCE (infero, to bear, or bring in), is of the same derivation as illation and induction. [The act of drawing a conclusion from premises.]

"To infer is nothing but by virtue of one proposition laid down as true, to draw in another as true; i.e., to see, or suppose such a connection of the two ideas of the inferred proposition."—Locke, Essay on Hum. Understand., bk. iv. ch. 17.

"An inference is a proposition which is perceived to be true, because of its connection with some known fact. There are many things and events which are always found together; or which constantly follow each other: therefore, when we observe one of these things or events, we infer that the other also exists, or has existed, or will soon take place. If we see the prints of human feet on the sands of an unknown coast, we infer that the country is inhabited; if these prints appear to be fresh, and also below the level of high water, we infer that the inhabitants are at no great distance; if the prints are those of naked feet, we infer that these inhabitants are savages; or if they are the prints of shoes, we infer that they are, in some degree, civilized."—Taylor, Elements of Thought.

"We ought to comprehend, within the sphere of inference,

all processes wherein a truth, involved in a thought or thoughts given as antecedent, is evolved in a thought which is found as consequent."—Spalding, Log., p. 1.

"We infer immediately, either by contraposition, by subalternation, by opposition (proper), or by conversion."—p. 160.

Mediate inference is the syllogistic.

INFERENCE and PROOF.—"Reasoning comprehends inferring and proving; which are not two different things, but the same thing regarded in two different points of view; like the road from London to York, and the road from York to London. He who infers, proves; and he who proves, infers; but the word infer fixes the mind first on the premiss and then on the conclusion; the word prove, on the contrary, leads the mind from the conclusion to the premiss. Hence, the substantives derived from these words respectively, are often used to express that which, on each occasion, is last in the mind; inference being often used to signify the conclusion (i.e., proposition inferred), and proof, the premiss. To infer, is the business of the philosopher; to prove, of the advocate."—Whately, Log., bk. iv. ch. 3, sec. 1.

Proving is the assigning a reason (or argument) for the support of a given proposition; inferring is the deduction of

a conclusion from given premisses."—Whately, ibid.

INFINITE (in or non finitum, unlimited or rather limitless).—
In geometry, infinite is applied to quantity which is greater than any assignable magnitude. But strictly speaking it means that which is not only without determinate bounds, but which cannot possibly admit of bound or limit.

"The infinite expresses the entire absence of all limitation, and is applicable to the one infinite Being in all his attributes. The absolute expresses perfect independence, both in being and in action. The unconditioned indicates entire freedom from every necessary relation. The whole three unite in expressing the entire absence of all restriction. But let this be particularly observed, they do not imply that the one infinite Being cannot exist in relation, they only imply that He cannot exist in a necessary relation, that is, if He exist in relation, that relation cannot be a necessary condition of his existence."—Calderwood, Philosoph. of the Infinite, p. 37, 1st ed.—V. Absolute, Unconditioned.

### INFINITE-

As to our knowledge of the *infinite* there are two opposite opinions.

According to some, the idea is purely negative, and springs up when we contemplate the ocean or the sky, or some object of vast extent to which we can assign no limits. Or, if the idea has anything positive in it, that is furnished by the imagination, which goes on enlarging the finite without limit.

On the other hand, it is said that the enlarging of the finite can never furnish the idea of the *infinite*, but only of the indefinite. The indefinite is merely the eonfused apprehension of what may or may not exist. But the idea of the *infinite* is the idea of an objective reality, and is implied as a necessary condition of every other idea. We cannot think of body but as existing in space, nor of an event but as occurring in time; and space and duration are necessarily thought of as *infinite*.

But have we or ean we have knowledge of the *infinite?* Boethius (In Præd., p. 113, ed. Bas.) is quoted as saying, "Infinitorum nulla eognitio est; infinita namque animo eomprehendi nequeunt; quod autem ratione mentis eireumdari non potest, nullius scientiæ fine eoneluditur: quare infinitorum seientia nulla est."

On the other hand, Cudworth has said (Intell. System, p. 449),—"Since infinite is the same with absolutely perfect, we having a notion or idea of the latter must needs have of the former."

But, while we cannot comprehend the infinite, we may apprehend it in contrast or relation with the finite. And this is what the common sense of men leads them to rest satisfied with, and, without attempting the metaphysical difficulty of reconciling the existence of the infinite with that of the finite, to admit the existence of both.

"Truth is bigger than our minds, and we are not the same with it, but have a lower participation only of the intellectual nature, and are rather apprehenders than comprehenders thereof. This is indeed one badge of our creaturely state, that we have not a perfectly comprehensive knowledge, or such as is adequate and commensurate to the essence of things."—Cudworth,

#### INFINITE-

Ancillon, Essai sur l'Idée et le Sentiment de l'Infini; Cousin, Cours de Philosoph., et Hist. de la Philosoph.; Sir W. Hamilton, Discussions on Philosophy, &c.; L. Velthuysen, Dissertatio de

Finito et Infinito: Descartes, Meditations.

"The infinite and the indefinite may be thus distinguished: the former implies an actual conceiving the absence of limits; the latter is a not conceiving the presence of limits-processes as different as searching through a house and discovering that a certain person is not there, as from shutting our eyes and not seeing that he is there. Infinity belongs to the object of thought; indefiniteness to the manner of thinking of it."-

Mansel, Lect. on Philosoph. of Kant, p. 29.

INFLUX (Physical) (influo, to flow in), is one of the theories as to our perception of external objects.—"The advocates of this scheme maintained that real things are the efficient causes of our perceptions, the word efficient being employed to signify that the things by means of some positive power or inherent virtue which they possess, were competent to transmit to the mind a knowledge of themselves. . . . External objects were supposed to operate on the nervous system by the transmission of some kind of influence, the nervous system was supposed to carry on the process by the transmission of certain images or representations, and thus our knowledge of external things was supposed to be brought about. The representations alone came before the mind; the things by which they were caused remained occult and unknown."—Ferrier, Inst. of Metaphys., p. 472.—V. CAUSES (OCCASIONAL).

INJURY (injuria, from in and jus, neglect or violation of right), in morals and jurisprudence is the intentional doing of wrong. We may bring harm or evil upon others without intending it. But injury implies intention, and awakens a sense of injustice and indignation, when it is done. It is on this difference in the meaning of harm and injury that Bishop Butler founds the distinction of resentment into sudden and deliberate.—Butler,

Sermons, viii. and ix.

INNATE (IDEAS).—[A priori principles of knowledge and of action. "Innate" implies that the power of recognizing such principles is provided for in the constitution of the mind. "Innate" does not mean inborn, in the sense of alleging that such principles are a conscious possession from the moment of

# INNATE (IDEAS)—

birth. The term "idea" should be discarded.—Ed.] Ideas. as to their origin, have been distinguished into adventitious, or such as we receive from the objects of external nature, as the idea or notion of a mountain, or a tree; factitious, or such as we frame out of ideas already acquired, as of a golden mountain, or of a tree with golden fruit; and innate, or such as are inborn and belong to the mind from its birth, as the idea of God or of immortality. Cicero, in various passages of his treatise De Natura Deorum, speaks of the idea of God and of immortality as being inserted, or engraven, or inborn in the "Intelligi necesse est, esse deos, quoniam insitas eorum, vel potius innatas cognitiones habemus."-Lib. i. sec. 17. In like manner, Origen (Adv. Celsum, lib. i. cap. 4), has said, "That men would not be guilty if they did not carry in their mind common notions of morality, innate and written in divine letters." It was in this form that Locke (Essay on Hum. Understand., bk. i.), attacked the doctrine of innate ideas. It has been questioned, however, whether the doctrine, as represented [misrepresented] by Locke, was really held by the ancient philosophers. And Dr. Hutcheson (Oratio Inauguralis, De Naturali hominum Societate) has the following passage: - "Omnes autem ideas, apprehensiones, et judicia, quæ de rebus, duce natura, formamus, quocunque demum tempore hoc fiat, sive que nature nostre viribus quibuscunque, necessario, fere atque universaliter,\* recipiuntur, innata quantum memini, dixerunt antiqui." Among modern philosophers it would be difficult to name any who held the doctrine in the form in which it has been attacked by Locke. In calling some of our ideas innate they merely used this word as synonymous with natural, and applied it, as Hutcheson thinks the ancients did, to certain ideas which men, as human or rational beings, necessarily and universally entertain.

"There are three senses in which an idea may be supposed to be *innate*; one, if it be something originally superadded to our mental constitution, either as an idea in the first instance fully developed; or as one undeveloped, but having the power of self-development: another, if the idea is a subjective

<sup>\*</sup> We have here, in 1730, the two marks of necessity and universality which subsequently were so much insisted on by Kant and others as characterizing all our à priori cognitions.

INNATE (IDEAS)—

condition of any other ideas, which we receive independently of the previous acquisition of this idea, and is thus proved to be in some way embodied in, or interwoven with, the powers by which the mind receives those ideas: a third, if, without being a subjective condition of other ideas, there be any faculty or faculties of mind, the exercise of which would suffice, independently of any knowledge acquired from without, spontaneously to produce the idea."—Dr. Alliot, Psychology and Theology, p. 93, 12mo, Lond. 1855.

"We are prepared to defend the following propositions in regard to innate ideas, or constitutional principles of the mind. First,—Negatively, that there are no innate ideas in the mind (1) as images or mental representations; nor (2) as abstract or general notions; nor (3) as principles of thought, belief, or action before the mind as principles. But, Second.—Positively (1) that there are constitutional principles operating in the mind, though not before the consciousness as principles; (2) that these come forth into consciousness as individual (not general) cognitions or judgments; and (3) that these individual exercises, when carefully inducted, but only when so, give us primitive or philosophic truths. It follows that, while these native principles operate in the mind spontaneously, we are entitled to use them reflexly in philosophic or theologic speculations only after having determined their nature and rule by abstraction and generalization."—M'Cosh, Meth. of Div. Govern., p. 508, 5th ed.

The doctrine of *innate ideas* is handled by Locke in his Essay on Hum. Understand., bk. i., and by most authors who treat of intellectual philosophy.—See also Ellis, Knowledge of Divine Things, pp. 59–86; Sherlock, On the Immortality of the Soul, ch. 2.

INSTINCT (ἐν οτ ἐντός and στίζω, intus pungo), signifies an internal stimulus. [Literally, direct or immediate stimulus from within. The word is thus an acknowledgment of our ignorance as to the exact nature of the stimulating power. It is an impulse guiding the living creature in actions, which is quite apart from the reasoning process in us, and superior to the lessons of experience, gathered by application of our rational power.—Ed.]

#### INSTINCT-

In its widest signification it has been applied to plants as well as to animals; and may be defined to be "the power or energy by which all organized forms are preserved in the individual, or continued in the species." It is more common, however, to consider instinct as belonging to animals. And in this view of it, Dr. Reid (Act. Pow., essay iii. part 1, ch. 2) has said—"By instinct I mean a natural blind impulse to certain actions without having any end in view, without deliberation, and very often without any conception of what we do." An instinct, says Paley (Nat. Theol., ch. 18), "is a propensity prior to experience and independent of instruction."

"An instinct," says Dr. Whately (Tract on Instinct, p. 21), "is a blind tendency to some mode of action independent of any consideration on the part of the agent, of the end to which the action leads."

The theories which have been proposed to explain the instinctive operations of the inferior animals may be arranged in three classes.

I. According to the *physical* theories, the operations of *instinct* are all provided for in the structure and organization of the inferior animals, and do not imply any mind or soul. The principle of life may be developed—

1. By the mechanical play of bodily organs. See Descartes, Epistles; Polignac, Anti-Lucretius, bk. vi.; Norris, Essay towards the Theory of an Ideal World, part 2, ch. 2.

towards the Theory of an Ideal World, part 2, ch. 2.

2. By Irritability: Badham, Insect Life; Mason Good, Book of Nature, vol. ii. p. 132; Virey, De la Physiologie dans scs rapports, avec la Philosophie, p. 394.

3. By Scnsation: Bushnan, Philosophy of Instinct and Reason, p. 178; Barlow, Connection between Physiology and Intellectual Philosophy; Kirby, Bridgewater Treatise, vol. ii. p. 255.

II. According to the *psychical* theories, the instinctive actions of the inferior animals are the results of mental powers or faculties possessed by them, analogous to those of understanding in man.

1. Mr. Coleridge calls instinct "the power of selecting and adapting means to a proximate end." But he thinks "that when instinct adapts itself, as it sometimes does, to varying

## INSTINCT-

circumstances, there is manifested by the inferior animals, an instinctive intelligence, which is not different in kind from understanding, or the faculty which judges according to sense in man."—Aids to Reflection, vol. i. p. 193, 6th ed.; Green, Vital Dynamics, App. F, p. 88, or Coleridge's Works, vol. ii. App. B, 5.

2. Dr. Darwin contends (Zoonomia, vol. i. 4to, pp. 256-57), that what have been called the instinctive actions of the inferior animals are to be referred to experience and reasoning, as well as those of our own species; "though their reasoning is from fewer ideas, is busied about fewer objects, and is

exerted with less energy."

3. Mr. Smellie (Philosophy of Nat. Hist., vol. i. 4to, p. 155), instead of regarding the instinctive actions of the inferior animals as the results of reasoning, regards the power of reasoning as itself an *instinct*. He holds that "all animals are, in some measure, rational beings; and that the dignity and superiority of the human intellect are necessary results of the great variety of *instincts* which nature has been pleased to confer on the species."—p. 159.

III. According to the theories which may be called hyper-psychical, the phenomena of instinct are the results of an intelligence, different from the human, which emanates upon the inferior animals from the supreme spirit or some subordinate spirit.

This doctrine is wrapped up in the ancient fable, that the gods, when pursued by the Titans, fled into Egypt, and took refuge under the form of animals of different kinds.

Father Bougeant, in a work entitled A Philosophical Amusement on the Language of Beasts, contends that the bodies of the inferior animals are inhabited by fallen and reprobate spirits.

Mr. French (Zoological Journal, No. 1) holds that the actions of the inferior animals are produed by good and evil spirits; the former being the cause of the benevolent, and the latter of the ferocious instincts.

Others have referred the operations of instinct to the direct agency of the Creator on the inferior animals.—See Newton, Optics, bk. iii., xx. query subjoined; Spectator, No. 120; Hancock, Essay on Instinct.

#### INSTINCT-

Dr. Reid has maintained (Act. Pow., essay iii. pt. i. ch. 2), that in the human being many actions, such as sucking and swallowing, are done by instinct; while Dr. Priestley (Examin. of Reid, &c., p. 70) regards them as automatic or acquired. And the interpretation of natural signs and other acts which Dr. Reid considers to be instinctive, Dr. Priestley refers to association and experience.

"We have every reason to believe that the power of specialized instincts is transmitted from one generation to another, and, where the circumstances favour it, goes on increasing from age to age in intensity, and in particular adaptations to the purposes demanded. All domesticated animals were originally wild; but when once tamed, the offspring in the next generation partake of the domesticated character by a specialized instinct. The case is the same with animals trained to particular purposes. The young pointer signals the game the very first time he takes the field; the young watch-dog barks at a stranger without ever being taught to do so. All confirmed habits which become a part of the animal nature seem to be imparted by hereditary descent; and thus what seems to be an original instinct may, after all, be but the accumulated growth and experience of many generations."—Morell, Introd. to Ment. Phil., pt. 6, ch. 3.

INTELLECT (intelligo, to choose between, to perceive a difference). Imore exactly, the understanding regarded as a power of comparison; more widely, the whole rational nature of man.) -Ed.] Intellect, sensitivity, and will, are the three heads under which the powers and capacities of the human mind are now generally arranged. In this use of it, the term intellect includes all those powers by which we acquire, retain, and extend our knowledge, as perception, memory, imagination, judgment, &c. "It is by those powers and faculties which compose that part of his nature commonly called his intellect or understanding that man acquires his knowledge of external objects; that he investigates truth in the sciences; that he combines means in order to attain the ends he has in view; and that he imparts to his fellow-creatures the acquisitions he has made."-Stewart, Active and Moral Powers, Introd.

The intellectual powers are commonly distinguished from

#### INTELLECT-

the moral powers; inasmuch as it is admitted that the moral powers partake partly of the intellect and partly of the sensitivity, and imply not only knowledge but feeling. [Still, it must be kept in view that the basis of all moral distinction is recognized by the intellect.—Ed.]

When the moral powers are designated active, it is meant only to intimate that while the function of the intellectual powers is to give knowledge, there are active powers which

prompt and regulate actions.

Lord Monboddo (Ancient Metaphysics, bk. ii. ch. 7) reduces the gnostic powers to two, viz.—sense and intellect. Under sense he includes the phantasy and also the comparing faculty, and that by which we apprehend ideas, either single or in combination. This he considers to be partly rational, and shared by us with the brutes. But intellect or  $\nu o \tilde{\nu}_{\xi}$ , he considers peculiar to man—it is the faculty by which we generalize and have ideas altogether independent of sense. He quotes Hierocles on the golden verses of Pythagoras, p. 160, ed. Needham), as representing the  $\lambda \acute{o}\gamma o_{\xi}$  or  $\psi \nu \chi \acute{\eta} \lambda o \gamma \iota \chi \acute{\eta}$ , as holding a middle place betwixt the irrational or lowest part of our nature and intellect, which is the highest.

"The term intellect is derived from a verb (intelligere), which signifies to understand; but the term itself is usually so applied as to imply a faculty which recognizes principles explicitly as well as implicitly; and abstract as well as applied; and therefore agrees with the reason rather than the understanding; and the same extent of signification belongs to the adjective intellectual."—Whewell, Elements of

Morality, Introd. 12.

"Understanding is Saxon and intellect is Latin for nearly the same idea: perhaps understanding describes rather the power of inference, a quickness at perceiving that which stands under the object of contemplation: perhaps intellect describes rather the power of judgment, a quickness at choosing between (inter and legere) the objects of contemplation."—Taylor, Synonyms.

Intellect and Intelligence.—"By Aristotle, vov; is used to

denote—

"1. Our higher faculties of thought and knowledge.

"2. The faculty, habit, or place of principles, that is,

### INTELLECT-

of self-evident and self-evidencing notions and judgments.

"The schoolmen, following Boethius, translated it by intellectus and intelligentia; and some of them appropriated the former of these terms to its first or general signification, the latter to its second or special."—Sir William Hamilton, Reid's Works, note A, sec, 5.

Intellect and intelligence are commonly used as synonymous. But Trusler has said, "It seems to me that intellectus ought to describe art or power, and intelligentia ought to describe use or habit of the understanding; such being the tendency of the inflections in which the words terminate. In this case intellect or understanding power is a gift of nature; and intelligence, or understanding habit, an accumulation of time. So discriminated, intellect is inspired, intelligence is acquired. The Supreme Intellect, when we are speaking of the Wisdom, the Supreme Intelligence when we are speaking of the Knowledge of God. Every man is endowed with understanding; but it requires reading to become a man of intelligence.—V. Reason, Understanding.

Intellectus Patiens and Intellectus Agens.—Aristotle distinguished between the intellectus patiens and intellectus agens. The former, perishing with the body (De Anima, cap. 5), by means of the senses, imagination, and memory, furnished the matter of knowledge; the latter, separable from the body, and eternal, gave that knowledge form. Under the impressions of the senses the mind is passive; but while external things rapidly pass, imagination does not allow them altogether to escape, but the knowledge of them is retained by the memory. But this knowledge, being the knowledge of singulars, cannot give universal notions, but merely generalized ones. intellectus agens, however, proceeding upon the information furnished by the senses, actually evolves the idea which the intellectus patiens potentially possessed. His illustration is,as light makes colours existing potentially, actually to be, so the intellectus agens converts into actuality, and brings, as it were, to a new life, whatever was discovered or collected by the intellectus patiens. As the senses receive the forms of things expressed in matter, the intellect comprehends the universal form, which, free from the changes of matter, is

## INTELLECT-

really prior to it and underlies the production of it as cause. The common illustration of Aristotle is that the senses perceive the form of a thing, as it is τό σίμόν, or a height; the intellect has knowledge of it as resembling τω κοίλω, a hollow, out of which the height was produced.

Aristotle has often been said to reduce all knowledge to experience. But although he maintained that we could not shut our eyes and frame laws and causes for all things, yet he maintained, while he appealed to experience, that the intellect was the ultimate judge of what is true.

See Hermann Rassow, Aristotelis de Notionis Definitione Doctrina, Berol., 1343.

According to Thomas Aquinas (Adv. Gentes, lib. iii. cap. 41), "Intellectus noster nihil intelligit sine phantasmate." But he distinguished between the intellect passive and the intellect active; the one receiving impressions from the senses, and the other reasoning on them. Sense knows the individual, intellect the universal. You see a triangle, but you rise to the idea of triangularity. It is this power of generalizing which specializes man and makes him what he is, intelligent.

INTENT or INTENTION (in-tendo, to tend to).—[Sometimes, purpose cherished within, but practically inoperative. More frequently, purpose as directing the use of means for the attainment of a selected end.—Ed.] In morals and in law, intention means that act of the mind by which we contemplate and design the accomplishment of some end. It is followed by the adoption and use of suitable means. But this is more directly indicated by the word purpose. "He had long harboured the intention of taking away the life of his enemy, and for this purpose he provided himself with weapons." Purpose is a step nearer action than intention. But both in law and in morals, intention, according as it is right or wrong, good or bad, affects the character of the action following [and the responsibility of the agent].

# INTENTION (Logical).

Quoth he, whatever others deem ye, I understand your metonymy.\*

<sup>&</sup>quot;The transference of words from the primary to a secondary meaning, is what grammarians call metonymy. Thus a door signifies both an opening in the wall (more strictly called the doorway) and a board which closes it; which are things neither similar nor analogous."—Whately, Log., bk. iii. sec. 10.

INTENTION (Logical)—

Your words of second-hand intention,
When things by wrongful names you mention.
Butler, Hudibras, part ii. eanto 3, 1, 587.

Intention, with logicians, has the same meaning as notion; as it is by notions the mind tends towards or attends to objects.

—V. NOTION.

Intention (First and Second).

"Nouns of the first intention are those which are imposed upon things as such, that conception alone intervening, by which the mind is carried immediately to the thing itself. Such are man and stone. But nouns of the second intention are those which are imposed upon things not in virtue of what they are in themselves, but in virtue of their being subject to the intention which the mind makes concerning them; as, when we say that man is a species, and animal a genus."—Aquinas, Opuscula, xlii. art. 12, ad init.

Raoul le Breton, Super Lib. Poster. Analyt. He was a

Thomist.

See Tractatio de Secundis Intentionibus secundum doctrinam

Scoti, by Sarnanus, 4to, Ursellis, 1622.

A first intention may be defined "a conception of a thing or things formed by the mind from materials existing without itself."

A second intention is "a conception of another conception or conceptions formed by the mind from materials existing in itself." Thus the conceptions "man, animal, whiteness," &c., are framed from marks presented by natural objects. "The conceptions, genus, species, accident, &c., are formed from the first intentions themselves viewed in certain relations to each other."—Mansel, Note to Aldrich, 1849, pp. 16, 17.

See Review of Whately's Logic, No. cxv. Edin. Review.

INTERPRETATION of NATURE.—"There are," says Bacon (Nov. Org., i. aph. 19), "two ways, and can be only two, of seeking and finding truth. One springs at once from the sense, and from particulars, to the most general axioms; and from principles thus obtained, and their truth assumed as a fixed point, judges and invents intermediate axioms. This is the way now in use. The other obtains its axioms (that is, its truths) also from the sense and from particulars, by a connected and gradual progress, so as to arrive, in the last place,

## INTERPRETATION of NATURE-

at the most general truths. This is the true way, as yet untried. The former set of doctrines we call," he says (Aph. 26), "for the sake of clearness, Anticipation of Nature," the

latter the 'Interpretation of Nature.'"

INTUITION (from intueor, to behold).—[Immediate knowledge direct perceiving or beholding of an object or principle. Leibnitz distinguished "knowledge" (cognitio) into intuitive and symbolical.—Opera. Philos., Erdmann, p. 79.—Ed.] "Sometimes the mind perceives the agreement or disagreement of two ideas immediately by themselves, without the intervention of any other; and this, I think, we may call intuitive knowledge. For in this the mind is at no pains of proving or examining, but perceives the truth as the eye doth the light, only by being directed towards it. Thus, the mind perceives that white is not black, that a circle is not a triangle, that three are more than two, and equal to one and two."-Locke, Essay on Hum. Understand., bk. iv. ch. 2.

"What we know or comprehend as soon as we perceive or attend to it, we are said to know by intuition: things which we know by intuition, cannot be made more certain by arguments, than they are at first. We know by intuition that all the parts of a thing together are equal to the whole of it. Axioms are propositions known by intuition."—Taylor, Ele-

ments of Thought.

"Intuition has been applied by Dr. Beattie and others, not only to the power by which we perceive the truth of the axioms of geometry, but to that by which we recognize the authority of the fundamental laws of belief, when we hear them enunciated in language. My only objection to this use of the word is, that it is a departure from common practice: according to which, if I be not mistaken, the proper objects of intuition are propositions analogous to the axioms prefixed to Euclid's Elements. In some other respects this innovation might perhaps be regarded as an improvement on the very limited and imperfect vocabulary of which we are able to availourselves in our present discussions."—Stewart, Elements. part ii. ch. 1, sec. 2.

"Intuition is properly attributed and should be carefully restricted, to those instinctive faculties and impulses, external and internal, which act instantaneously and irresistibly,

### INTUITION-

which were given by nature as the first inlets of all knowledge, and which we have called the *Primary Principles*, whilst self-evidence may be justly and properly attributed to axioms, or the *Secondary Principles* of truth."—Tatham, *Chart and Scale of Truth*, ch. 7, lect. 1.

On the difference between knowledge as intuitive, immediate, or presentative, and as mediate, or representative, see Sir

W. Hamilton, Reid's Works, note B.

"An intuition is any knowledge whatsoever, sensuous or intellectual, which is apprehended immediately; a notion, on the other hand, a product of the discursive faculty, is any knowledge whatsoever which is apprehended mediately."—De

Quincey, Rhetoric.

Intuition is used in the extent of the German Anschauung, to include all the products of the perceptive (external or internal) and imaginative faculties; every act of consciousness, in short, of which the immediate object is an individual, thing, state, or act of mind, presented under the condition of distinct existence in space or time."—Mansel, Prolegom. Log.,

p. 9.

"Besides its original and proper meaning (as a visual perception), it has been employed to denote a kind of apprehension and a kind of judgment. Under the former head it has been used to denote-1. A perception of the actual and present, in opposition to the abstractive knowledge which we have of the possible in imagination, and of the past in memory. 2. An immediate apprehension of a thing in itself, in contrast to a representative, vicarious or mediate, apprehension of it, in or through something else. (Hence by Fichte, Schelling, and others, intuition is employed to designate the eognition as opposed to the conception of the absolute). 3. The knowledge, which we cannot adequately represent in imagination, in contradistinction to the 'symbolical' knowledge which we cannot image, but only think or conceive, through and under a sign or word. (Hence, probably, Kant's application of the term to the forms of the sensibility, the imaginations of Time and Space, in contrast to the forms or categories of the understanding). 4. Perception proper (the objective), in contrast to sensation proper (the subjective), in our sensitive consciousness. 5. The simple apprehension of a notion, in

### INTUITION—

contradistinction to the complex apprehension of the terms of a proposition.

"Under the latter head it has only a single signification, viz .: To denote the immediate affirmation by the intellect, the predicate does or does not pertain to the subject, in what are called self-evident propositions."—Sir W. Hamilton, Reid's Works, note A, sec. 5, p. 759.

INTUITION and CONCEPTION.—"The perceptions of sense are immediate, those of the understanding mediate only; sense refers its perceptions directly and immediately to an object. Hence the perception is singular, incomplex, and immediate, i.e., is intuition. When I see a star, or hear the tones of a harp, the perceptions are immediate, incomplex, and intuitive. This is the good old logical meaning of the word intuition. In our philosophic writings, however, intuitive and intuition have come to be applied solely to propositions; it is here extended to the first elements of perception, whence such propositions spring. Again, intuition, in English, is restricted to perceptions à priori; but the established logical use and wont applies the word to every incomplex representation whatever; and it is left for further and more deep inquiry to ascertain what intuitions are founded on observation and experience, and what arise from à priori sources."-Semple, Introd. to Metaphys. of Ethics, p. 34.

INVENTION (invenio, to come in, or to come at) is the creation or construction of something which has not before existed. Discovery is the making manifest something which hitherto has been unknown. We discover or uncover what is hidden. We come at new objects. Galileo invented the telescope.

Harvey discovered the circulation of the blood.

"We speak of the invention of printing, the discovery of America. Shift these words, and speak, for instance, of the invention of America, you feel at once how unsuitable the language is. And why? Because Columbus did not make that to be which before him had not been. America was there before he revealed it to European eyes; but that which before was, he showed to be; he withdrew the veil which hitherto had concealed it, he discovered it."-Trench, On Words.

Newton discovered the law of gravitation, but Watt invented

### INVENTION-

the steam engine. We speak with a true distinction, of the inventions of Art, the discoveries of Science.

In Locke and his contemporaries, to say nothing of the older writers, to invent is currently used for to discover. Thus Bacon says, "Logic does not pretend to invent science, or the axioms of sciences, but passes it over with a cuique in sua arte

credendum."—Adv. of Learning.

IRONY (εἰρωνεία, dissimulation), is an ignorance purposely affected to provoke or confound an antagonist. It was very much employed by Socrates against the Sophists. "Irony often consists in disdaining qualities that are held in esteem, and this sort of thing Socrates used to do."-Arist., Eth., iv. 7, 14. In modern times it was adopted by Burke in his Defence of Natural Society, in which, assuming the person of Bolingbroke, he proves, according to the principles of that author, that the arguments he brought against ecclesiastical, would equally lie against civil, institutions. Sir William Drummond, in his Edipus Judaieus, maintained that the history of the twelve patriarchs is a mythical representation of the signs of the Zodiac. Dr. Townsend, in his Edipus Romanus, attempts to show that upon the same principles the twelve patriarchs were prophecies of the twelve Cæsars. Dr. Whately, in a pamphlet entitled Historic Doubts, attempted to show that objections similar to those against the Scripture-history, and much more plausible, might be urged against all the received accounts of Napoleon Bonaparte.

JUDGMENT.-[An exercise of comparison, and also the decision reached.-Ed.] "A judgment is a combination of two concepts, related to one or more common objects of possible intuition."-Mansel, Prolegom. Log., p. 60.

Our judgments, according to Aristotle, are either problematical, assertive, or demonstrable; or, in other words, the results

of opinion, of belief, or of science.

"The problematical judgment is neither subjectively nor objectively true, that is, it is neither held with entire certainty by the thinking subject, nor can we show that it truly

#### JUDGMENT-

represents the object about which we judge. It is a mere opinion. It may, however, be the expression of our presentiment of certainty; and what was held as mere opinion before proof, may afterwards be proved to demonstration. Great discoveries are problems at first, and the examination of them leads to a conviction of their truth, as it has done to the abandonment of many false opinions. In other subjects, we cannot, from the nature of the case, advance beyond mere opinion. Whenever we judge about variable things, as the future actions of men, the best course of conduct for ourselves under doubtful circumstances, historical facts about which there is conflicting testimony, we can but form a problematical judgment, and must admit the possibility of error at the moment of making our decision.

"The assertive judgment is one of which we are fully persuaded ourselves, but cannot give grounds for our belief that shall compel men in general to coincide with us. It is therefore subjectively, but not objectively, certain. It commends itself to our moral nature, and in so far as other men are of the same disposition, they will accept it likewise.

"The 'demonstrative judgment is both subjectively and objectively true. It may either be certain in itself, as a methematical axiom is, or capable of proof by means of other judgments, as the theories of mathematics and the laws of physical science."—Thomson, Outline of Laws of Thought, pp. 304-6.

Port Royal definition:—"Judgment is that operation of the mind through which, joining different ideas together, it affirms or denies the one or the other; as when, for instance, having the ideas of the earth and roundness, it affirms or denies that the earth is round."

When expressed in words a judgment is called a proposition. According to Mr. Locke, judgment implies the comparison of two or more ideas. But Dr. Reid says he applies the word judgment to every determination of the mind concerning what is true or false, and shows that many of these determinations are simple and primitive beliefs (not the result of comparing two or more ideas), accompanying the exercise of all our faculties, judgments of nature, the spontaneous product of intelligence.—Intell. Pow., essay vi. ch. 1.

## JUDGMENT-

Chap. 4.—"One of the most important distinctions of our judgments is, that some of them are intuitive, others grounded on argument."

In his Inquiry, ch. 2, sec. 4, he shows that judgment and belief, so far from arising from the comparison of ideas, in

some cases precede even simple apprehension.

The same view has been taken by Adolphe Garnier, in his Traité des Facultés de l'ame, 3 tom. 8vo, Paris, 1852.

Judgments, Analytic, Synthetic, and Tautolagous.—"Some judgments are merely explanatory of their subject, having for their predicate a conception which it fairly implies, to all who know and can define its nature. They are called analytic judgments because they unfold the meaning of the subject, without determining anything new concerning it. If we say that 'all triangles have three sides,' the judgment is analytic; because having three sides is always implied in a right notion of a triangle. Such judgments, as declaring the nature or essence of the subject, have been called 'essential propositions.'

Judgments of another class attribute to the subject something not directly implied in it, and thus increase our knowledge. They are called *synthetic*, from *placing together* two notions not hitherto associated. 'All bodies possess power of attraction' is a *synthetic judgment*, because we can think of bodies without thinking of attraction as one of their

immediate primary attributes.

"We must distinguish between analytic and tantologous judgments. Whilst the analytic display the meaning of the subject, and put the same matter in a new form, the tautologous only repeat the subject, and give us the same matter in the same form, as 'whatever is, is.' 'A spirit is a spirit.'

"It is a misnomer to call analytic judgments identical propositions.—Mill, Log., bk. i. ch. 6. 'Every man is a living creature' would not be an identical proposition unless 'living creature' denoted the same as 'man;' whereas it is far more extensive. Locke understands by identical propositions only such as are tautologons (bk. iv. ch. 8, 3)."—Thomson, Outline of Laws of Thought, pp. 194, 195.

JURISPRUDENCE (jurisprudentia, the science of rights).—[This rests on the science of the right. For personal rights are

## JURISPRUDENCE-

based upon what is right in human conduct.—Ed.] Some refer the Latin word jus to jussum, the supine of the verb jubeo, to order or enact. Others refer it to justum, that which is just and right. But as right is, or ought to be, the foundation of positive law, a thing is jussum, quia justum est—made

law because it was antecedently just and right.

Jurisprudence is the science of rights in accordance with positive law. It is distinguished into universal and particular. "The former relates to the science of law in general, and investigates the principles which are common to all positive systems of law, apart from the local, partial, and accidental circumstances and peculiarities by which these systems respectively are distinguished from one another. Particular jurisprudence treats of the laws of particular states; which laws are, or at least profess to be, the rules and principles of universal jurisprudence itself, specifically developed

and applied."

There is a close connection between jurisprudence and morality, so close that it is difficult to determine precisely the respective limits of each. Both rest upon the great law of right and wrong as made known by the light of nature. But while morality enjoins obedience to that law in all its extent, jurisprudence exacts obedience to it only in so far as the law of nature has been recognized in the law of nations or the positive institutions of society. Morality is, therefore, more extensive than jurisprudence. Morality has equal reference to the whole of human duty. Jurisprudence has special reference to social duty. All social duty as enjoined by the light of nature-whether included under justice or benevolencebelongs to morality. Jurisprudence treats chiefly or almost exclusively of duties of justice, which have been made the subject of positive law; which duties of benevolence cannot well be. The rules of morality as such, are enforced merely by the law within; but in so far as they have been adopted by jurisprudence, they can be enforced by external law. The moralist appeals to our sense of duty, the jurist to a sense of authority or law. "As the sense of duty is the sense of moral necessity simply, and excluding the sense of physical (or external) compulsion, so the sense of law is the sense of the same necessity, in combination with the notion of physical

## JURISPRUDENCE-

(or external) compulsion in aid of its requirements."—Foster, Elements of Jurisprudence, p. 39.

The difference between morality and jurisprudence as to extent of range, may be illustrated by the difference of signification between the word right, when used as an adjective, and when used as a substantive. Morality contemplates all that is right in action and disposition. Jurisprudence contemplates only that which one man has a right to from another. "The adjective right," says Dr. Whewell (Elements of Morality, No. 84), "has a much wider signification than the substantive right. Everything is right which is conformable to the supreme rule of human action; but that only is a right which, being conformable to the supreme rule, is realized in society and vested in a particular person. Hence the two words may often be properly opposed. We may say, that a poor man has no right to relief; but it is right he should have it. A rich man has a right to destroy the harvest of his fields; but to do so would not be right." So that the sphere of morality is wider than that of jurisprudence,—the former embracing all that is right, the latter only particular rights realized or vested in particular persons.

Morality and jurisprudence differ also in the immediate ground of obligation. Morality enjoins us to do what is right, because it is right. Jurisprudence enjoins us to give to others their right, with ultimate reference, no doubt, to the truth made known to us by the light of nature, that we are morally bound to'do so; but, appealing more directly to the fact, that our doing so can be demanded by our neighbour, and that his demand will be enforced by the authority of positive law. And this difference between the immediate ground of obligation in matters of morality and matters of jurisprudence, gives rise to a difference of meaning in the use of some words which are generally employed as synonymous. For example, if regard be had to the difference between morality and jurisprudence, duty is a word of wider signification than obligation; just as right, the adjective, is of wider signification than right, the substantive. It is my duty to do what is right. I am under obligation to give another man his right. A similar shade of difference in meaning may be noticed in reference to the words ought and obliged. I ought

## JURISPRUDENCE-

to do my duty; I am obliged to give a man his right. I am not obliged to relieve a distressed person, but I ought to do so.

These distinctions are sometimes explained by saying, that what is enjoined by jurisprudence is of perfect obligation, and what is enjoined only by morality is of imperfect obligation,—that is, that we may or may not do what our conscience dictates, but that we can be compelled to do what positive law demands. But these phrases of perfect and imperfect obligation are objectionable, in so far as they tend to represent the obligations of morality as inferior to those of jurisprudence—the dictates of conscience as of less authority than the enactments of law—whereas the latter rest upon the former, and the law of nations derives its binding force from the law of nature.

Grotius, De Jure Belli et Pacis; Puffendorf, De Officio Hominis et Civis; Leibnitz, Jurisprudentia; Montesquieu, Spirit of Laws; Burlamaqui, Principles of Natural Law; Rutherforth, Institutes of Natural Law; Mackintosh, Discourse of the Law of Nature and of Nations; Lerminier, Sur le Droit;

Whewell, Hist. of Mor. Phil., p. 16.

JUSTICE (δικαιοσύνη, justitia), is one of the four cardinal virtues. [The equal between man and man, grounded on equal subjection to moral law, and equality of rights among men; or founded upon mutual contract, or natural relations.—Ed.] It consists, Cicero says (De Finibus, lib. v. cap 23), in suo cuique tribuendo, in according to every one his right. By the Pythagoreans, and also by Plato, it was regarded as including all human virtue or duty. The word righteousness is used in our translation of the Scripture in a like extensive signification. As opposed to equity, justice (τὸ νομικόν) means doing merely what positive law requires, while equity (70 "700) means doing what is fair and right in the circumstances of every particular case. Justice is not founded in law, as Hobbes and others hold, but in our idea of what is right. And laws are just or unjust in so far as they do or do not conform to that idea.

"To say that there is nothing just or unjust but what is commanded or prohibited by positive laws," remarks Montesquieu (Spirit of Laws, bk. i. ch. 1), "is like saying that the radii of a circle were not equal till you had drawn the circumference."

## JUSTICE—

Justice may be distinguished as ethical, economical, and political. The first consists in doing justice between man and man as men; the second, in doing justice between the members of a family or household; and the third, in doing justice between the members of a community or commonwealth. These distinctions are taken by More in his Enchiridion Ethicum, and are adopted by Grove in his Moral Philosophy.

Plato's Republic contains a delineation of justice [iv. 432].

-Aristotle, Ethic., lib. v.; Cicero, De Finibus.

Horace gives the idea of a just or good man.—Epist., lib. i. 16, 40.—V. RIGHT, DUTY, EQUITY.

KABALA.—In Hebrew kabal signifies "to receive;" masora, "to hand down." "The Kabalists believe that God has expressly committed his mysteries to certain chosen persons, and that they themselves have received those mysteries in trust, still further to hand them down to worthy recipients."—Etheridge, Heb. Liter., p. 293.

The origin of the kabala has been carried back to Moses, and even to Adam. The numerous allusions to it in the Mishna and Gemara, show, that under the Tanaim, a certain philosophy, or religious metaphysic, was secretly taught, and that this system of esoteric teaching related especially to the Creation and the Godhead. So early as A.D. 189, the time of the Mishna redaction, it was recognized as an established theosophy, the privilege of select disciples. Two works of the Mishnaic period are still extant in authentic and complete form, viz., Sepher Tetsira and the Zohar. The kabala, considered as a constructed science, is theoretical and practical. The practical department comprises a symbolical apparatus, and rules for the use of it. The theoretical consists of two partsthe cosmogonic, relating to the visible universe, and the theogonic and pneumatological, relating to the spiritnal world and the perfections of the Divine nature. Pantheism is the foundation of both. The universe is a revelation of the Infinitean immanent effect of His ever active power and presence. Towards the end of the fifteenth century the kabala was adopted by several Christian mystics. Raymond Lully,

#### KABALA-

Reuchlin, Henry More, and others paid much attention to it.

Reuchlin, De Arte Cabalistica, fol. Hagen, 1517; De Verbo Mirifico, fol. Basil, 1494; Athanasius Kircher, Œdipus Œgyptiacus, fol. Rom., 1652; Henry More, Cabbala, fol. Lond. 1662; Ad. Franck, La Kabbale, 8vo, Paris, 1843; Etheridge, Hebrew Literature, 8vo, Lond. 1856; Picus (J. Paris), Cabalistarum Selectiora Obscurioraque Dogmata, 12mo, Venet. 1569. Hosenroth, Kabbala Denudata, in A. J. ii. 9.

as it is concerned with a single thing, or with relations. It is immediate or mediate, according as the thing itself is known, or knowledge is acquired through some representation, or through a rationalizing process.—Ed.]

.... "Learning dwells In heads replete with thoughts of other men, Knowledge in minds attentive to their own."

"Knowledges (or cognitions), in common use with Bacon and our English philosophers, till after the time of Locke, ought not to be discarded. It is, however, unnoticed by any English lexicographer."—Sir William Hamilton, Reid's Works, note A. sec. 5, p. 763.

"Knowledge is the perception of the connection and agreement, or disagreement and repugnancy of any of our ideas. Where this perception is, there is knowledge; and where it is not, then, though we may fancy, guess, or believe, yet we always come short of knowledge."-Locke, Essay on Hum. Understand., bk. iv. ch. 1. And in ch. 14, he says, "The mind has two faculties conversant about truth and falsehood. First, knowledge, whereby it certainly perceives, and is undoubtedly satisfied of the agreement or disagreement of any ideas. Secondly, judgment, which is the putting ideas together. or separating them from one another in the mind, when their certain agreement or disagreement is not perceived, but presumed to be so." Knowledge is here opposed to opinion. But judgment is the faculty by which we attain to certainty, as well as to opinion. "And," says Dr. Reid (Intell. Pow., essay iv. ch. 3), "I know no authority, besides that of Mr. Locke, for calling knowledge a faculty, any more than for calling opinion a faculty."

## KNOWLEDGE-

"Knowledge implies three things,—1st, Firm Belief; 2d, Of what is true; 3d, On sufficient grounds. If any one, e.g., is in doubt respecting one of Euclid's demonstrations, he cannot be said to know the proposition proved by it; if, again, he is fully convinced of anything that is not true, he is mistaken in supposing himself to know it; lastly, if two persons are each fully confident, one, that the moon is inhabited, and the other, that it is not (though one of these opinions must be true), neither of them could properly be said to know the truth, since he cannot have sufficient proof of it."—Whately, Log., bk. iv. ch. 2, sec. 2, note.

Knowledge supposes three terms: a being who knows, an object known, and a relation determined between the knowing being and the known object. This relation properly consti-

tutes knowledge.

But this relation may not be exact, in conformity with the nature of things; knowledge is not truth. Knowledge is a subjective conception—a relative state of the human mind; it resides in the relation, essentially ideal, of our thought and its object. Truth, on the contrary, is the reality itself, the reality ontological and absolute, considered in their absolute relations with intelligence, and independent of our personal conceptions. Truth has its source in God; knowledge proceeds from man. Knowledge is true and perfect from the moment that our conception is really conformable to that which is—from the moment that our thought has seized the reality. And, in this view, truth may be defined to be the conformity of our thought with the nature of its object.

But truth is not yet certitude. It may exist in itself without being acquired by the human mind, without existing actually for us. It does not become certain to us till we have acquired it by the employment of method. Certitude is thus truth brought methodically to the human intelligence,—that is, conducted from principle to principle, to a point which is evident of itself. If such a point exist, it is plain that we can attain to all the truths which attach themselves to it directly or indirectly; and that we may have of these truths, howsoever remote, a certainty as complete as that of the point of

departure.

Certitude, then, in its last analysis, is the relation of truth to

### KNOWLEDGE-

knowledge, the relation of man to God, of ontology to psychology. When the human intelligence, making its spring, has seized divine truth, in identifying itself with the reality, it ought then, in order to finish its work, to return upon itself, to individualize the truth in us; and from this individualization results the certitude which becomes, in some sort, personal, as knowledge; all the while preserving the impersonal nature of truth.

Certitude then reposes upon two points of support, the one subjective—man or the human consciousness; the other objective and absolute—the Supreme Being. God and consciousness are the two arbiters of certitude.—Tiberghien, Essai des Connais, Hum., p. 34.

"The schoolmen divided allhuman knowledge into two species, cognitio intuitiva, and cognitio abstractiva. By intuitive knowledge they signified that which we gain by an immediate presentation of the real individual object; by abstractive, that which we gain and hold through the medium of a general term; the one being, in modern language, a perception, the other a concept..." Morell, Psychology, p. 158. V. ABSTRACTIVE.

# Knowledge as Intuitive or Symbolical—

Leibnitz took a distinction between knowledge as intuitive or symbolical. When I behold a triangle actually delineated, and think of it as a figure with three sides and three angles, &c., according to the idea of it in my mind, my knowledge is intuitive. But when I use the word triangle, and know what it means without explicating all that is contained in the idea of it, my knowledge is blind or symbolical.—Leibnitz, De Cognitione, &c.; Wolf, Psychol. Empir., sec. 286, 289.

Knowledge as Immediate and Presentative or Intuitive—and as Mediate and Representative or Remote—

"A thing is known immediately or proximately, when we cognize it in itself; mediately or remotely, when we cognize it in or through something numerically different from itself. Immediate cognition, thus the knowledge of a thing in itself, involves the fact of its existence; mediate cognition, thus the knowledge of a thing in or through something not itself, involves only the possibility of its existence.

"An immediate cognition, inasmuch as the thing known is itself presented to observation, may be called a presentative;

#### KNOWLEDGE-

and inasmuch as the thing presented is, as it were, viewed by the mind face to face, may be called an intuitive cognition. A mediate cognition, inasmuch as the thing known is held up on mirrored to the mind in a vicarious representation, may be called a representative cognition.

"A thing known is an object of knowledge.

"In a presentative or immediate cognition there is one sole object; the thing (immediately) known and the thing existing being one and the same. In a representative or mediate cognition there may be discriminated two objects; the thing (immediately) known and the thing existing being numerically different.

"A thing known in itself is the (sole) presentative or intuitive object of knowledge, or the (sole) object of a presentative or intuitive knowledge. A thing known in and through something else is the primary, mediate, remote, real, existent, or represented object of (mediate knowledge)—objectum quod; and a thing through which something else is known is the secondary, immediate, proximate, ideal, vicarious, or representative object of (mediate) knowledge—objectum quo or per quod. The former may likewise be styled—objectum entitativum."—Sir W. Hamilton, Reid's Works, note B, sec. 1.

LANGUAGE.—[Expression of thought, feeling, and purpose, whether spoken or written.—Ed.] "The ends of language in our discourse with others are chiefly these three: first, to make known one man's thoughts or ideas to another; secondly, to do it with as much ease and quickness as is possible; and thirdly, thereby to convey knowledge of things."—Locke, Essay on Hum. Understand., bk. iii. ch. 10.

Language has been thus divided by Mons. Duval-Jouve, Logic, p. 201:—

Reid, Inquiry, ch. ii. sec. 2.--V. SIGNS.

LATENT MODIFICATIONS OF MIND.—Sir W. Hamilton recognizes three degrees of mental latency: -1. That which belongs to all the parts of our knowledge which we are not thinking of at the time. I know a language not merely while I make use of it, but inasmuch as I can apply it when and how I will. 2. When the mind contains knowledge or habits of action of which it is wholly unconscious in its ordinary state, but which are revealed to consciousness in certain extraordinary exaltations of its power-Memory of languages brought by fever; and, 3. Mental modifications of which we are unconscious, but which manifest their existence by effects of which we are conscious-"When we hear the distant murmur of the sea—this is a sum made up of parts-and if the noise of each wave made no impression on our sense, the noise of the sea, which is the result, would not be realized."

In like manner, one thought rises after another whose consecution we cannot trace to any law of association with the preceding, but both are associated with an intermediate thought which latent at the time suggests. If a number of balls be placed in a line, and the cue at the end of the line struck, motion will be manifested by the ball at the other end, but not by the intermediate balls. Something like this is the train of thought.—Lectures, iii. p. 355. V. Morell's Introd. to Mental Philos., part i. ch. 3.

LAUGHTER is the act of expressing our sense of the ridiculous. This act, or rather the sense of the ridiculous which prompts it, has been thought peculiar to man, as that which distinguishes him from the inferior animals.\*—Hutcheson, Essay on Laughter; Beattie, Essay on Laughter and Ludicrous Composition; Akenside, Pleasures of Imagin., bk. iii. Spectator, Nos. 47 and 249.

LAW comes from the Anglo-Saxon verb signifying "to lay down."
—[Law is physical, established sequence: intellectual, a condition of intellectual action in order that truth may be reached; and moral, an imperative which determines the right guidance of our higher life.—Ed.]

"All things that are have some operation not violent or

<sup>\*</sup>The ludierous pranks of the puppy and the kitten make this doubtful; and Montalgne said he was not sure whether his favourite cat might not sometimes be laughing as much at him as with him.

#### LAW-

casual. That which doth assign unto each thing the kind, that which doth moderate the force and power, that which doth appoint the form and measure of working, the same we term a law."—Hooker, Eccles. Pol., bk. i. sec. 2; Coleridge, Lit. Rem., vol. iii. p. 29.

"Laws in their most extended signification are the necessary relations arising from the nature of things; and, in this sense, all beings have their laws, the Deity has his laws, the material world has its laws, superior intelligences have their laws, the beasts have their laws, and man has his laws."—Montesquieu, Spirit of Laws, bk. i. ch. 1.

Thus understood, the word comprehends the laws of the physical, metaphysical, and moral universe. Its primary signification was that of a command or a prohibition, addressed by one having authority to those who had power to do or not to do. There are in this sense laws of society, laws of morality, and laws of religion—each resting upon their proper authority. But the word has been transferred into the whole philosophy of being and knowing. When a fact frequently observed recurs invariably under the same circumstances, we compare it to an act which has been prescribed, to an order which has been established, and say it recurs according to a law. On the analogy between political laws or laws proper, and those which are called metaphorically laws of nature, see Lindley, Introduction to Jurisprudence, App. p. 1; Austin, Province of Jurisprudence Determined, p. 186.

#### Law and Cause.

The word law expresses the constant and regular order according to which an energy or agent operates. It may thus be distinguished from cause—the latter denoting efficiency, the former denoting the mode according to which efficiency is developed. "It is a perversion of language," says Paley (Nat. Theol., ch. i),! "to assign any law, as the efficient, operative cause of anything. A law presupposes an agent; this is only the mode, according to which an agent proceeds; it implies a power; for it is the order according to which that power acts. Without this agent, without this power, which are both distinct from itself, the law does nothing, is nothing." To the same purpose Dr. Reid has said, "The laws of nature are the rules according to which effects are produced; but there must

### LAW-

be a cause which operates according to these rules. The rules of navigation never steered a ship, nor the law of gravity never

moved a planet."

"Those who go about to attribute the origination of mankind (or any other effect) to a bare order of law of nature, as the primitive effecter thereof, speak that which is perfectly irrational and unintelligible; for although a law or rule is the method and order by which an intelligent being may act, yet a law, or rule, or order, is a dead, unactive, uneffective, thing of itself, without an agent that useth it, and exerciseth it as his rule and method of action. What would a law signify in a kingdom or state, unless there were some person or society of men that did exercise and execute, and judge, and determine, and act by it, or according to it?"—Hale, Prim. Origin., ch. 7, sec. 4.

To maintain that the world is governed by laws, without ascending to the superior reason of these laws—not to recognize that every law implies a legislator and executor, an agent to put it in force, is to stop half-way; it is to hypostatize these laws, to make beings of them, and to imagine fabulous divinities in ignoring the only God who is the source of all laws, and who governs by them all that lives in the universe.—See Tiberghien, Essai des Connais. Hum., p.

743.

"A law supposes an agent and a power; for it is the mode. according to which the agent proceeds, the order according to which the power acts. Without the presence of such an agent, of such a power, conscious of the relations on which the law depends, producing the effects which the law prescribes, the law can have no efficacy, no existence. Hence we infer, that the intelligence by which the law is ordained, the power by which it is put into action, must be present at all times and in all places, where the effects of the law occur: that thus the knowledge and the agency of the Divine Being pervade every portion of the universe, producing all action and passion, all permanence and change. The laws of matter are the laws which he, in his wisdom, prescribes to his own acts; his universal presence is the necessary condition of any course of events; his universal agency, the only organ of any efficient force."—Whewell, Astronomy, p. 361.

LAW—

## Law, Physical, Mental, Moral, Political.

Laws may acquire different names from the difference in the agents or energies which operate according to them. A stone when thrown up into the air rises to a height proportional to the force with which it is thrown, and then falls to the ground by its own gravity. This takes place according to physical laws, or what are commonly called laws of nature.—See M'Cosh, Meth. of Div. Govern., bk. ii. ch. 1.

"Those principles and faculties are the general laws of our constitution, and hold the same place in the philosophy of mind that the general laws we investigate in physics hold in that branch of science."—Stewart, Elements, part i. Introd. When an impression has been made upon a bodily organ a state of sensation follows in the mind. And when a state of sensation has been long continued or often repeated it comes to be less sensibly felt. These are mental laws. We have a faculty of memory by which the objects of former consciousness are recalled; and this faculty operates according to the laws of association.

Moral laws are derived from the nature and will of God, and the character and condition of man, and may be understood and adopted by man, as a being endowed with intelligence and will, to be the rules by which to regulate his actions. It is right to speak the truth. Gratitude should be cherished. These things are in accordance with the nature and condition of man, and with the will of God—that is, they are in accordance with the moral law of conscience and of revelation.

Political laws are prohibitions or injunctions promulgated by those having authority to do so, and may be obeyed or disobeyed; but the disobedience of them implies punishment.

"The intent or purpose of a law is wholly different from the motives or grounds of the law. The former is its practical end or effect; the latter, the pre-existing circumstances which suggested and caused its enactment.\* For example, the

<sup>\*</sup> Snarez (De Legibus, iii. 20. sec. 2) says, "Sine dubio in animo legislatoris hæc dno distincta sunt, seilicet voluntas sen intentio ejus, secundum quam vult præcipere, et ratio, ob quam movetur."

The ratio legis and the mens legis are distinguished by Grotins (J. B. et P., ii. 16, sec. 8) with Barbeyrae's notes; and by Puffendorff (v. 12, sec. 10). The purpose of a law and its motive have often been confounded under the general term ratio legis.—See Savigny, System des Rechts, vol. i. pp. 216-224.

## LAW-- BICHYBD!

existence of a famine in a country may tend to the enactment of a poor law. In this case the famine is the motive or ground of the law; and the relief of the poor its intent or purpose. The one is its positive cause, the latter its desired effect."—Sir G. C. Lewis, Method of Observ. in Politics, ch. 12, sec. 6.

In reference to the moral law, Hobbes and his followers have overlooked the difference between a law and the principle of the law. An action is not right merely in consequence of a law declaring it to be so. But the declaration of the law proceeds upon the antecedent rightness of the action.

Law and Form, "though correlative terms, must not, in strict accuracy, be used as synonymous. The former is used properly with reference to an operation; the latter with reference to its product. Conceiving, judging, reasoning, are subject to certain laws; concepts, judgments, syllogisms, exhibit certain

forms."—Mansel, Prolegom. Log., p. 240.

LAW (Empirical).—"Scientific inquirers give the name of empirical laws to those uniformities which observation or experiment has shown to exist, but on which they hesitate to rely in cases varying much from those which have been actually observed, for want of seeing any reason why such a law should exist. It is implied, therefore, in the notion of an empirical law, that it is not an ultimate law; that if true at all, its truth is capable of being, and requires to be, accounted for. It is a derivative law, the derivation of which is not yet known. To state the explanation, the why of the empirical law, would be to state the laws from which it is derived; the ultimate causes on which it is contingent. And if we knew these, we should also know what are its limits; under what conditions it would cease to be fulfilled."—Mill, Log., bk. iii. ch. 16.

As instances of *empirical laws* he gives the local laws of the flux and reflux of the tides in different places; the succession of certain kinds of weather to certain appearances of the sky, &c. But these do not deserve to be called *laws*.

LEMMA (from λαμβάνω, to take for granted, to assume).—This term is used to denote a preliminary proposition, which, while it has no direct relation to the point to be proved, yet serves to pave the way for the proof. In Logic, a premiss

#### LEMMA--

taken for granted is sometimes called a lemma. To prove some proposition in mechanics, some of the propositions in

geometry may be taken as lemmata.

LIBERTARIAN.—[One who holds that man is capable of rational self-guidance, in the face of desire, affection, and emotion, though he may also allow himself to be swayed by these inclinations of his nature.—Ed.] "I believe he (Dr. Crombie) may claim the merit of adding the word Libertarian to the English language, as Priestly added that of Necessarian."—Correspondence of Dr. Reid, p. 88.

Both words have reference to the questions concerning

liberty and necessity, in moral agency.

LIBERTY of the WILL or LIBERTY of a MORAL AGENT.—
[Self-determination by the use of our rational powers.—Ed.]

"The idea of liberty is the idea of a power in any agent to do or forbear any particular action, according to the determination or thought of the mind, whereby either of them is preferred to the other."—Locke, Essay on Hum. Understand.,

bk. ii. ch. 21, sec. 8.

"By the *liberty* of a moral agent, I understand a power over the determinations of his own will. If, in any action, he had power to will what he did, or not to will it, in that action he is free. But if, in every voluntary action, the determination of his will be the necessary consequence of something involuntary in the state of his mind, or of something in his external circumstances, he is not free; he has not what I call the *liberty* of a moral agent, but is subject to necessity."—Reid, Act. Pow., essay iv. ch. 1.

It has been common to distinguish liberty into freedom from

co-action, and freedom from necessity.

Freedom from co-action implies, on the one hand, the absence of all impediment or restraint, and, on the other hand, the absence of all compulsion or violence. If we are prevented from doing what is in our power, when we desire and will to do it, or, if we are compelled to do it, when we desire and will not to do it, we are not free from co-action. This general explanation of freedom agrees equally with bodily freedom, mental freedom, and moral freedom. Indeed, although it is common to make a distinction between these, there is no difference, except what is denoted by the different epithets

## LIBERTY-

introduced. We have bodily freedom, when our body is not subjected to restraint or compulsion—mental freedom, when no impediment or violence prevents us from duly exercising our powers of mind—and moral freedom, when our moral principles and feelings are allowed to operate within the sphere which has been assigned to them. Now it is with freedom regarded as moral that we have here to do—it is with freedom as the attribute of a being who possesses a moral nature, and who exerts the active power which belongs to him, in the light of reason, and under a sense of responsibility. Liberty of this kind is called freedom from necessity.

Freedom from necessity is also called liberty of election, or power to choose, and implies freedom from anything invincibly determining a moral agent. It has been distinguished into liberty of contrariety, or the power of determining to do either of two actions which are contrary, as right or wrong, good or evil; and liberty of contradiction, or the power of determining to do either of two actions which are contradictory, as to walk or to sit still, to walk in one direction or

in another.

Freedom from necessity is sometimes also called [quite unwarrantably] liberty of indifference, because, before he makes his election, the agent has not determined in favour of one action more than another. Liberty of indifference, however, does not mean, as some would have it, liberty of equilibrium, or that the agent has no more inclination towards one action or one mode of action than towards another; for although he may have motives prompting more urgently to one action or course of action, he still has liberty of election, if he has the power of determining in favour of another action or another course of action. Still less can the phrase liberty of indifference be understood as denoting a power to determine in opposition to all motives, or in absence of any motive. A being with liberty of indifference in the former of these senses would not be a reasonable being; and an action done without a motive is an action done without an end in view, that is, without intention or design, and, in that respect, could not be called a moral action, though done by a moral agent.

Liberty of will may be viewed—1st, in respect to the object,

## LIBERTY-

and 2d, in respect of the action. In both respects it may be liberty of—1st, contrariety, or 2d, of contradiction.

Liberty of contrariety in respect of the object is when the will is indifferent to any object and to its opposite or contrary—as when a man is free, for the sake of health, to take hot water or cold water. Liberty of contradiction is when the will is indifferent to any object, and to its opposite or contradictory—as walking and not walking.

In respect of the act of will, there is liberty of contrariety, when the will is indifferent as to contrary actions concerning the same particular object,—as to choose or reject some particular good. There is liberty of contradiction, when the will is free not to contrary action, but to act or not to act, that is, to will or not to will, to exercise or suspend volition.

Liberty has also been distinguished into—1st, liberty of specification, and 2d, liberty of exercise. The former may be said to coincide with liberty of contrariety, as to do good or evil; and the latter with liberty of contradiction—as to do good or not to do it.—Baronins, Metaphys., p. 96.

LIFE belongs to organized bodies, that is, animals and vegetables. Birth and development, decay and death, are peculiar to living bodies. Is there a vital principle, distinct on the one hand from matter and its forces, and on the other, from mind and its energies? According to Descartes, Borelli, Boerhäave. and others, the phenomena of living bodies may be explained by the mechanical and chemical forces belonging to matter. According to Bichat, there is nothing in common—but rather an antagonism-between the forces of dead matter and the phenomena of life, which he defines to be "the sum of functions which resist death." Bichat and his followers are called Organicists. Barthez and others hold that there is a vital principle distinct from the organization of living bodies, which directs all their acts and functions which are only vital, that is, without feeling or thought. Their doctrine is Vitalism. The older doctrine of Stahl was called Animism. according to which the sonl, or anima mundi, presides not only over the functions of the sensibility and thought but over all the functions and actions of the living economy.

Are life and sensibility two things essentially distinct, or two things essentially united? LIFE-

Irritability and Excitability are terms applied to the sensibility which vegetables manifest to external influences, such as light, heat, &c. Bichat ascribed the functions of absorption, secretion, circulation, &c., which are not accompanied with feeling, to what he called organic sensibility.

The characteristics of the several kingdoms of nature given by Linnæus are the following:—Lapides crescunt; vegetabilia crescunt et vivunt; animalia crescunt, vivunt et sentiunt.

The theories of life and its connection with the phenomena of mind are thus classified by Morell, *Psychology*, p. 77, note:—

"1. The chemical theory. This was represented by Sylvius in the seventeenth century, who reduced all the phenomena of vital action and organization to chemical processes. 2. The mechanical theory. This falls to the time when Harvey discovered the circulation of the blood, and Boerhäave represented the human frame as one great hydraulic machine. 3. The dynamical theory. Here we have the phenomena of mind and of life drawn closely together. The writings of Stahl especially show this point of view. He regarded the whole man as being the product of certain organic powers, which evolve all the various manifestations of human life, from the lowest physical processes to the highest intellectual. 4. The theory of irritation. This we find more especially amongst the French physiologists, such as Bichat, Majendie, and others, who regard life as being the product of a mere organism, acted on by physical stimuli from the world without. 5. The theory of evolution. Schultz and others of the German writers of the same school, regard life as a regular evolution, created by opposing powers in the universe of existence, from the lowest forms of the vital functions to the highest spheres of thought and activity. To these speculators nature is not a fixed reality, but a relation. It is perpetual movement, an unceasing becoming, a passing from death to life, and from life to death. And just as physical life consists in the tension of the lower powers of nature, so does mental life consist in that of its higher powers. 6. The theory of the Divine ideal. Here, Carus, prompted by Schelling's philosophy, has seized the ideal side of nature, as well as the real, and united them together in his LIFE-

theory of the genesis of the soul, and thus connected the whole dynamics of nature with their *Divine original*."

Plato, Timœus; Aristotle, De Anima, lib. ii. cap. 10; Descartes, Œuvres, par Cousin, tom. iv.; Barthez, Bichat, Cabanis, and Berard; Coleridge, Posthumous Essay; Hints towards the Formation of a more Comprehensive Theory of Life. [As to the problem regarding the origin of life, see Huxley's Lay Sermons, No. vii; Stirling's As Regards Protoplasm; Bastian's Evolution and the Origin of Life; and his Beginning of Life.—Ed.]

LOGIC (λογική, λόγος, reason, reasoning, language). - [The name is used in a variety of senses. First, there is the most restricted, known as Formal Logic,-the science of the laws of thought, as thought.—Hamilton, Mansel, Thomson. Second, the theory of evidence, or philosophy of the whole mental processes by which the mind attains to truth, as developed by Mill. Third, a rationalised theory of all known existence, which is the commonly accepted meaning of the term with German philosophers.—Ed.] The word logica was early used in Latin; while h dozinh and to dozinov were late in coming into use in Greek. Aristotle did not use either of them. His writings which treat of the syllogism and of demonstration were entitled Analytics. The name Organon was not given to the collected series of his writings upon logic till after the invention of printing. The reason of the name is, that logic was regarded as not so much a science in itself as the instrument of all science. The Epicureans called it xavovixn, the rule by which true and false are to be tried. Plato, in the Phædrus, has called it a part (μέρος), and in the Parmenides the organ (Öeyavov) of philosophy.—See Trendelenburg, Elementa Log. Arist., 8vo, Basil, 1842, pp. 48, 49. An old division of philosophy was into logic, ethics, and physics. But excluding physics, philosophy may be regarded as consisting of four parts—viz., psychology, logic, cthics, and metaphysics properly so called.

"Logic is derived from the word (\(\lambda\)\(\rapprox\)\(\rapprox\), which signifies communication of thought usually by speech. It is the name which is generally given to the branch of inquiry (be it called science or art) in which the act of the mind in reasoning is considered, particularly with reference to the connection of thought and language."—De Morgan, Formal Logic, ch. 2.

LOGIC-

"We divide logicians into three schools, according as they hold words, things, or conceptions, to be the subject of logic; and entitle them respectively, the *verbal*, the *phenomenal*, and

the conceptional."—Chretien, Logical Method, p. 95.

"When we attend to the procedure of the human intellect we soon perceive that it is subject to certain supreme laws which are independent of the variable matter of our ideas, and which posited in their abstract generality, express the absolute and fixed rules not only of the human intellect, but of all thought, whatever be the subject which frames it or the object which it concerns. To determine those universal laws of thought in general, in order that the human mind in particular may find in all its researches a means of control, and an infallible criterion of the legitimacy of its procedure, is the object of logic.—Manuel de Phil. Introd., p. 7, 8vo, Par. 1846. At the beginning of the prior analytics, Aristotle has laid it down that 'the object of logic is demonstration.'

"Logic is the science of the laws of thought as thought—that is, of the necessary conditions to which thought, considered in itself, is subject."—Sir W. Hamilton, Reid's Works,

p. 698, note.

"'Logic is the science of the laws of thought.' It is a science rather than an art. As the science of the necessary laws of thought it is pure. It only gives those principles which constitute thought; and pre-supposes the operation of those principles by which we gain the materials for thinking. And it is the science of the form or formal laws of thinking, and not of the matter."—Thomson, Outline of the Laws of Thought.

Others define Logic to be the science of the laws of reasoning. Dr. Whately has said, "Logic in its most extensive application, is the science as well as the art of reasoning. So far as it institutes an analysis of the process of the mind in reasoning, it is strictly a science; while so far as it investigates the principles on which argumentation is conducted, and furnishes rules to secure the mind from error in its deductions, it may be called the art of reasoning."

Kirwan has said (*Logic*, vol. i. p. 1), "*Logic* is both a science and an art; it is a *science* inasmuch as, by analyzing the elements, principles, and structure of arguments, it

## LOGIC-

teaches us how to discover their truth or detect their fallacies, and point out the sources of such errors. It is an art, inasmuch as it teaches us how to arrange arguments in such manner that their truth may be most readily perceived or their falsehood detected." Sir William Hamilton thinks that Dr. Whately had this passage in view when he constructed his own definition; but he adds, "Not a single reason has been alleged to induce us to waver in our belief, that the laws of thought, and not the laws of reasoning, constitute the adequate object of the science."—Discussions, pp. 131-34.

According to the significations attached to the terms art and science, and according to the point of view in which it is regarded, *logic* may be called a science or an art, or both, that is, a scientific art.

Thought may manifest itself in framing concepts, or judgments, or reasonings; and logic treats of these under three corresponding heads. Method, which is the scientific arrangement of thoughts, is frequently added as a fourth head. But to some it appears that method belongs more properly to psychology than to logic. Barthelemy St Hilaire, who takes this view, has said (Dict. des Sciences Philosoph., art. "Logique"), "In logic considered as a science there are necessarily four essential parts, which proceed from the simple to the compound, and in the following order, which cannot be changed:—1, A theory of the elements of a proposition; 2, A theory of propositions; 3, A general theory of reasoning formed of propositions connected with one another according to certain laws; and, lastly, a theory of that special and supreme kind of reasoning which is called demonstration, and gives assurance to the mind of man of the forms of truth, if it be not truth itself."

LOVE.—[Inclination of the nature towards persons regarded as good, involving admiration, and eagerness to help them. In view of the latter characteristic, it is properly named Affection, ad, and facio.—Ed.] Love and Hatred are the two genetic or mother passions or affections of mind, from which all the others take their rise. The former is awakened by the contemplation of something which is regarded as good; and the latter by the contemplation of something which is regarded as evil. Hence springs a desire to seek the one,

LOVE-

and a desire to shun the other; and desire, under its various forms and modifications, may be found as an element in all the manifestations of the sensitivity.

MACROCOSM and MICROCOSM (μακρός, large; μικρός, small;

κόσμος, world).

"As for Paracelsus, certainly he is injurious to man, if (as some eminent chemists expound him) he calls a man a microcosm, because his body is really made up of all the several kinds of creatures the macrocosm or greater world consists of, and so is but a model or epitome of the universe."

-Boyle, Works, vol. ii. p. 54.

Many ancient philosophers regarded the world as an animal, consisting like man of a soul and a body. This opinion, exaggerated by the mystics, became the theory of the macrocosm and the microcosm, according to which man was an epitome of creation, and the universe was man on a grand scale. The same principles and powers which were perceived in the one were attributed to the other, and while man was believed to have a supernatural power over the laws of the universe, the phenomena of the universe had an influence on the actions and destiny of man. Hence arose Alchemy and Astrology, which were united in the Hermetic medicine. Such views are fundamentally pantheistic, leading to the belief that there is only one substance, manifesting itself in the universe by an infinite variety, and concentred in man as in an epitome. Van Helmont, Paracelsus, Robert Fludd, and others held some of these views.

Dr. Reid has said (Active Pow., essay iii. part i. ch. 1), "Man has not, without reason, been called an epitome of the universe. His body, by which his mind is greatly affected, being a part of the material system, is subject to all the laws of inanimate matter. During some part of his existence, his state is very like that of a vegetable. He rises, by imperceptible degrees, to the animal, and, at last, to the rational life, and has the principles that belong to all."

"Man is not only a microcosm, in the structure of his body, but in the system, too, of his impulses, including all of them

## MACROCOSM and MICROCOSM-

within him, from the bases to the most sublime."—Harris, Philosoph. Arrange., cap. 17.

"Man is a living synthesis of the universe."—Tiberghien. Cousin (Introd. aux Œuvres Inedites d'Abelard, p. 127,) has

Gousin (Introd. aux Œuvres Inedutes d'Abetara, p. 127,) has given an analysis of a MS. work by Bernard de Chartres, entitled Megacosmus et Microcosmus.

MAGIC (μαγεία, from μάγος, a Magian).—" It is confessed by all of understanding that a magician (according to the Persian word) is no other than a studious observer and expounder of divine things."—Raleigh, Hist. of the World, bk. i. ch. 11, sec. 3.

But while *magic* was used primarily to denote the study of the more sublime parts of knowledge, it came at length to signify a science of which the cultivators, by the help of demons

or departed souls, could perform things miraculous.

"Natural magic is no other than the absolute perfection of natural philosophy."—Raleigh, Hist. of the World, bk. i. ch. 11, sec. 2. Baptista Porta has a treatise on it, which was published in 1589 and 1591. It is characterized by Bacon (De Augm., lib. iii.) as full of credulous and superstitious observations and traditions on the sympathies and antipathies and the occult and specific qualities of things. Sir D. Brewster has a treatise under the same title, but of very different character and contents, and answering to the definition of Raleigh.—Campanella, De Sensu Rerum et Magia, 4to, Par. 1637; Longinus, Trinon Magicum, 12mo, Francf. 1616.

MAGNANIMITY and EQUANIMITY (magnus, great; aequus, even; animus, mind), are two words which were much used

by Cicero and other ancient ethical writers.

Magnamity was described as lifting us above the good and evil of this life—so that while the former was not necessary to our happiness, the latter could not make us miserable. The favourite example of magnanimity, among the Romans, was Fabius Maximus, who, amidst the provocation of the enemy and the impatience of his countrymen, delayed to give battle till he saw how he could do so successfully.

Equanimity supposes change of state or fortune, and means the preservation of an even mind in the midst of vicissitude—neither elated unduly by prosperity nor depressed unduly by adversity. Equanimity springs from Magnanimity.

# MAGNANIMITY and EQUANIMITY—

Indeed both these words denote frames or states of mind from which special acts of virtue spring—rather than any particular virtue. They correspond to the active and passive fortitude of modern moralists.

"Aequam memento rebus in arduis Servare mentem, non secus in bonis Ab insolenti temperatam Lætitia, moriture Delli."—Hor.

Est ubi vis, animus si te non deficit æquus."—Hor.

"True happiness is to no spot confined; If you preserve a firm and equal mind, "Tis here, 'tis there, 'tis everywhere."

MAGNETISM (Animal). By animal magnetism we understand these peculiar physical and physiological phenomena which are produced in others principally for the cure of diseases, by a conscious mechanical influence. The mutual impressions produced by living beings upon each other is merely a modified universal law of mutual impression, which has been designated natural magnetism; for this reason, Mesmer, its discoverer, called this artificial method of producing it, by analogous reasoning, magnetism. "It is called animal magnetism because the animal part of man is the medium, the conducting body, of this penetrating magnetism, and is more particularly active in that particular which distinguishes our animal from the vegetable organizations, namely, in the direction of our senses, and the higher faculties of man." It has also been called life magnetism and mesmerism. Kluge and others call it animal magnetism, in contradistinction to animal, mineral, and vegetable magnetism. See Mesmerism, by J. A. Mesmer, edited by Wolfast.

MANICHEISM, MANICHEAN (so called from Manes, a Persian philosopher, who flourished about the beginning of the third century), is the doctrine that there are two eternal principles or powers, the one good and the other evil, to which the happiness and misery of all beings may be traced. It has been questioned whether this doctrine was ever maintained to the extent of denying the Divine unity, or that the system of things had not an ultimate tendency to good. It is said that the Persians, before Manes, maintained dualism

# MANICHEISM, MANICHEAN-

so as to give the supremacy to the good principle; and that Manes maintained both to be equally eternal and absolute.

The Manichean doctrine was ingrafted upon Christianity about the middle of the third century. The Cathari or Albigenses who appeared in the twelfth century are said also to have held the doctrine of dualism or ditheism.

To refute it we have only to say that if the two opposing principles were equal, they would neutralize each other—if they were unequal, the stronger would prevail, so that there would be nothing but evil, or nothing but good in the world; which is contrary to fact.

Matter, Hist. Critiq. du Gnosticism, 3 tom., Paris, 1843;

Beausobre, Hist. du Manichéisme.

of one uniform substance, the object of the senses; and that perception, with its modes, is the result, necessary or otherwise, of the organization of the brain."—Belsham, Moral Philosophy, ch. xi. sec. 1. The doctrine opposed to this is spiritualism, or the doctrine that there is a spirit in man, that he has a soul as well as a body.

Baxter and Drew have both written on the immateriality of the soul. Belsham and Priestley have defended materialism

without denying the existence of God.

Priestley, Disquisitions on Matter and Spirit; Three Dissertations on the Doctrine of Materialism and Philosophical Necessity; Price, Letters on Materialism and Philosophical Necessity. [The most recent and advanced form of the doctrine is that mind is only a function of the brain. Brain organization, with hereditary transmission, may account for all that distinguishes the intellect of man. "The brain secretes thought, as the liver secretes bile."—Cabanis, Rapport du Physique et du Moral de l'Home.—Ed.]

MATHEMATICS (μαθηματική [sc. ἐπιστήμη] τὰ μαθήματα), according to Descartes, treat of order and measures. "Illa omnia tantum, in quibus ordo vel mensura examinatur, ad mathesim referri, nec interesse utrum in numeris vel figuris, vel astris, vel sonis, aliove quovis objecto talis mensura quærenda est."—Reg. ad Direct. Ingenii, Reg. 4.

Mathematics are either Pure or Mixed. Arithmetic, Geometry, Algebra, and the Differential and Integral Calculus

## MATHEMATICS—

belong to Pure Mathematics. Mixed Mathematics is the application of Pure Mathematics to physical science in its various departments: Mechanics, Hyrodynamics, Optics, Astronomy, Acoustics, Electricity, Magnetism, &c., are physicomathematical sciences. Among philosophers, Anaximander of Miletus, and Pythagoras are called mathematicians .-

-(Bacon, De Aug. Scient., lib. iii. cap. 6.

MATTER, as opposed to mind or spirit, is that which occupies space [is extended], and with which we become acquainted by means of our bodily senses or organs. Everything of which we have any knowledge is either matter or mind, i.e., spirit. Mind is that which knows and thinks. Matter is that which is known by means of the bodily senses.

"The first form which matter assumes is extension, or length, breadth, and thickness—it then becomes body. If body were infinite there could be no figure, which is body bounded. But body is not physical body, unless it partake of or is constituted of one or more of the elements, fire, air, earth, or water."-Monboddo, Ancient Metaphys., bk. ii.

cap. 2.

According to Descartes the essence of mind is thought, and the essence of matter is extension. He said, Give me extension and motion, and I shall make the world. Leibnitz said the essence of all being, whether mind or matter, is force. Matter is an assemblage of simple forces or monads. system of physics may be called dynamical, in opposition to that of Newton, which may be called mechanical; because Leibnitz held that the monads possessed a vital or living energy. We may explain the phenomena of matter by the movements of ether, by gravity and electricity; but the ultimate reason of all movement is a force primitively communicated at creation, a force which is everywhere, but which while it is present in all bodies is differently limited; and this force, this virtue or power of action, is inherent in all substances material and spiritual. See Leibnitz, De Primæ Philosophiæ Emendatione et de Notione Substantiæ, or Nouveau Systeme de la Nature et de la Communication des Substances, in the Journal des Savans, 1695. On the various hypotheses to explain the activity of matter, see Stewart, Out-

## MATTER-

lines, part ii. ch. 2, sec. 1, and Act. and Mor. Pow., last ed. vol. ii. note A.

The properties which have been predicated as essential to matter are impenetrability, extension, divisibility, inertia, weight. To the senses it manifests colour, sound, smell, taste, heat, and motion; and by observation it is discovered

to possess elasticity, electricity, magnetism, &c.

Metaphysicians have distinguished the qualities of matter into primary and secondary, and have said that our knowledge of the former, as of impenetrability and extension, is clear and absolute—while our knowledge of the latter, as of sound and smell, is obscure and relative. This distinction taken by Descartes, adopted by Locke and also by Reid and Stewart, was rejected by Kant, according to whom, indeed, all our knowledge is relative. And others who do not doubt the objective reality of matter, hold that all our knowledge of all its qualities is the same in kind. See the distinctions precisely stated and strenuously upheld by Sir William Hamilton, Reid's Works, note D; and ingeniously controverted by Mons. Emile Saisset, in Dict. des Sciences Philosoph., art. "Matiere."

## Matter and Form.

Matter as opposed to form is that elementary constituent in composite substances, which appertains in common to them all without distinguishing them from one another. Everything generated or made, whether by nature or art, is generated or made out of something else, and this something else is called its subject or matter. Such is iron to the boat, such is timber to the boat. Matter void of form was called  $\Im \lambda \eta = \pi \varrho \acute{\omega} \tau \eta$ , or, prima materia— $(\nu \lambda \eta)$ , means wood.—V. Hylozoism). Form when united to matter makes it determinate and constitutes body.

"The term matter is usually applied to whatever is given to the artist, and consequently, as given, does not come within the province of the art itself to supply. The form is that which is given in and through the proper operation of the art. In sculpture, the matter is the marble in its rough state as given to the sculptor; the form is that which the sculptor in the exercise of his art communicates to it. The distinction between matter and form in any mental operation is analogous

#### MATTER-

to this. The former includes all that is given to, the latter all that is given by, the operation. In the division of notions, for example, the generic notion is that given to be divided; the addition of the difference in the art of division constitutes the species. And accordingly, Genus is frequently designated by logicians the material, Difference, the formal part of the species."—Mansel, Prolegom. Log., p. 226.

Harris, Philosoph. Arrange., ch. iv.; Monboddo, Ancient Metaphys., bk. ii. ch. 1; Reid, Intell. Pow., essay ii. ch. 19.

-V. ACTION, PROPOSITION.

MAXIM (maxima propositio, a proposition of the greatest weight), is used by Boethius as synonymous with axiom, or a self-evident truth.—Sir Will. Hamilton, Reid's Works, note A, sec. 5. It is used in the same way by Locke, Essay on Hum. Understand., bk. iv. ch. 7. "There are a sort of propositions which, under the name of maxims and axioms, have passed for principles of science." "By Kant, maxim was employed to designate a subjective principle, theoretical or practical, i.e., one not of objective validity, being exclusively relative to some interest of the subject. Maxim and regulative principle are, in the critical philosophy, opposed to law and constitutive principles."

In Morals, we have Rochefoucald's Maxims.

In Theology, Fenelon wrote Maxims of the Saints, and Rollin made a collection of Maxims drawn from holy writ.

MEMORY (from memini, preterite of the obsolete form meneo or meno, from the Greek μένειν, manere, to stay or remain. From the contracted form μναω comes μνήμη, the memory in which things remain.—Lennep).—[Commonly the power of retaining and reproducing our knowledge. Or, as Hamilton puts it, it includes a faculty of retention, of reproduction, and of representation.—Lects. ii. 205.—Ed.] "The great Keeper, or Master of the Rolls of the soul, a power that can make amends for the speed of time, in causing him to leave behind him those things which else he would so carry away as if they had not been."—Bishop Hall, Righteous Mammon.

Consciousness testifies that when a thought has once been present to the mind, it may again become present to it, with the knowledge that it has formerly been present to it. When

## MEMORY—

this takes place we are said to remember, and the faculty of

which remembranee is the act is memory.

"The word memory is not employed uniformly in the same precise sense; but it always expresses some modification of that faculty which enables us to treasure up, and preserve for future use, the knowledge we acquire; a faculty which is obviously the great foundation of all intellectual improvement, and without which no advantage could be derived from the most enlarged experience. This faculty implies two things; a capacity of retaining knowledge, and a power of recalling it to our thoughts when we have occasion to apply it to use. The word memory is sometimes employed to express the capacity, and sometimes the power. When we speak of a retentive memory, we use it in the former sense; when of a ready memory, in the latter."—Stewart, Philosoph. of Hum. Mind, ch. 6.

Memory has, and must have, an object; for he that remembers must remember something, and that which he remembers is the object of memory. It is neither a decaying sense, as Hobbes would make it, nor a transformed sensation, as Condillac would have it to be; but a distinct and original faculty, the phenomena of which cannot be included under those of any other power. The objects of memory may be things external to us, or internal states and modes of consciousness; and we may remember what we have seen, touched, or tasted; or we may remember a feeling of joy or sorrow which we formerly experienced, or a resolution or purpose which we previously formed.

Hobbes would confine memory to objects of sense. He says (Hum. Nature, ch. 3, sec. 6), "By the senses, which are numbered according to the organs to be five, we take notice of the objects without us, and that notice is our conception thereof: but we take notice also, some way or other, of our conception, for when the conception of the same thing cometh again, we take notice that it is again, that is to say, that we have had the same conception before, which is as much as to imagine a thing past, which is impossible to the sense which is only of things present; this, therefore, may be accounted a sixth sense, but internal; not external as the

rest, and is commonly called remembranee."

## MEMORY-

Mr. Stewart holds that memory involves "a power of recognizing, as former objects of attention, the thoughts that from time to time occur to us: a power which is not implied in that law of our nature which is called the association of ideas." But the distinction thus taken between memory and association is not very consistent with a further distinction which he takes between the memory of things and the memory of events.—(Elements, ch. 6). "In the former case, thoughts which have been previously in the mind, may recur to us without suggesting the idea of the past, or of any modification of time whatever; as when I repeat over a poem which I have got by heart, or when I think of the features of an absent friend. In this last instance, indeed, philosophers distinguish the act of the mind by the name of conception; but in ordinary discourse, and frequently even in philosophical writing, it is considered as an exertion of memory. In these and similar cases, it is obvious that the operations of this faculty do not necessarily involve the idea of the past. The case is different with respect to the memory of events. When I think of these, I not only recall to the mind the former objects of its thoughts, but I refer the event to a particular point of time; so that, of every such act of memory, the idea of the past is a necessary concomitant." Mr. Stewart therefore supposes "that the remembrance of a past event is not a simple act of the mind; but that the mind first forms a conception of the event, and then judges from circumstances, of the period of time to which it is to be referred. But the remembrance of a thing is not a simple act of the mind, any more than the remembrance of an event. The truth seems to be that things and events recur to the mind equally unclothed or unconnected with the notion of pastness .- (See Young, Intellect. Philosoph., lect. xvi.) And it is not till they are recognized as objects of former consciousness that they can be said to be remembered. But the recognition is the act of the judging faculty. Thoughts which have formerly been present to the mind may again become present to it without being recognized. Nay, they may be entertained for a time as new thoughts, but it is not till they have been recognized as objects of former consciousness that they can be regarded

#### MEMORY-

as remembered thoughts,\* so that an act of memory, whether of things or events, is by no means a simple act of the mind."

Mr. Locke (Essay on Hum. Understand., bk. ii. ch. 10), treats of retention. "The next faculty of the mind (after perception), whereby it makes a further progress towards knowledge, is that which I call retention, or the keeping of those simple ideas, which from sensation or reflection it hath received. This is done two ways: first, by keeping the idea which is brought into it for some time actually in view; which is called contemplation. The other way of retention, is the power to revive again in our minds those ideas which, after imprinting, have disappeared, or have been as it were laid aside out of sight; and thus we do, when we conceive heat or light, yellow or sweet,—the object being removed. This is memory, which is as it were the storehouse of our ideas."—V. RETENTION.

The circumstances which have a tendency to facilitate or insure the retention or the recurrence of anything by the memory, are chiefly—Vividness, Repetition, and Attention. When an object affects us in a pleasant or in a disagreeable manner—when it is frequently or familiarly observed—or when it is examined with attention and interest, it is more easily and surely remembered.

"The things which are best preserved by the memory," said Lord Herbert (De Veritate, p. 156), "are the things which please or terrify—which are great or new—to which much attention has been paid—or which have been oft repeated,—which are apt to the circumstances—or which have many things related to them."

Memory in all its manifestations is very much influenced, and guided by what have been called the laws of association. [For laws of association, V. Hamilton's Lects. ii. 233. Mill's Exam. of Hamilton, 3d ed. 219.—Ed.]

In its first manifestations, memory operates spontaneously, and thoughts are allowed to come and go through the mind without direction or control. But it comes subsequently to be exercised with intention and will; some thoughts being

<sup>\*</sup> Aristotle (De Memoria et Reminiscentia, cap. 1), has said that memory is always accompanied with the notion of time, and that only those animals that have the notion of time have memory.

# MEMORY-

sought and invited, and others being shunned and as far as possible excluded. Spontaneous memory is remembrance. Intentional memory is recollection or reminiscence.

The former in Greek is Μνήμη, and the latter 'Ανάμνησις. In both forms, but especially in the latter, we are sensible of the influence which association has in regulating the exercise of this faculty.

By memory, we not only retain and recall former knowledge, but we also acquire new knowledge. It is by means of memory that we have the notion of continued existence or duration; and also the persuasion of our personal identity, amidst all the changes of our bodily frame, and all the alterations of our temper and habits.

Memory, in its spontaneous or passive manifestation, is common to man with the inferior animals. But Aristotle denied that they are capable of recollection or reminiscence, which is a kind of reasoning by which we ascend from a present consciousness to a former, and from that to a more remote, till the whole facts of some case are brought again back to us. And Dr. Reid has remarked that the inferior animals do not measure time nor possess any distinct knowledge of intervals of time. In man memory is the condition of all experience, and consequently of all progress.

Memory in its exercises is very dependent upon bodily organs, particularly the brain. In persons under fever, or in danger of drowning, the brain is preternaturally excited; and in such cases it has been observed that memory becomes more remote and far-reaching in its exercise than under ordinary and healthy circumstances. Several authentic cases of this kind are on record. (See Coleridge, Biographia Literaria; De Quincey, Confessions of an English Opium-Eater; and Sir John Barrow, Autobiography, p. 398). And hence the question has been suggested, whether thought be not absolutely imperishable, or whether every object of former consciousness may not, under peculiar circumstances, be liable to be recalled?

Aristotle, De Memoria et Reminiscentia; Beattie, Dissertations; Reid, Intel. Pow., essay iii.; Stewart, Elements, ch. 6. MENTAL PHILOSOPHY.—The adjective mental comes to us from the Latin mens. [A rational explanation of the facts of

## MENTAL PHILOSOPHY-

consciousness, and of the problems issuing out of these facts. Mental Philosophy has two divisions, Intellectual Philosophy and Moral Philosophy:—the Philosophy of knowing and the Philosophy of right action. To both divisions there belongs a Psychology, or science of mental operations; and also a Metaphysic, or science of transcendent realities.—Ed.]

MERIT (meritum, from μέρος, a part or portion of labour or reward), means good desert; having done something worthy of praise or reward. [All right actions are meritorious, that is, they give warrant for self-approbation on the part of the agent, and are from the very nature of moral law, entitled to the approbation of all moral beings.—Ed.]

"Fear not the auger of the wise to raise;
Those best can bear reproof, who merit praise."
Pope, Essay on Criticism,

In seeing a thing to be right, we see at the same time that we ought to do it; and when we have done it we experience a feeling of conscious satisfaction or self-approbation. We thus come by the idea of merit or good desert. The approbation of our own mind is an indication that God approves of our conduct; and the religious sentiment strengthens the moral one. We have the same sentiments towards others. When we see another do what is right, we applaud him. When we see him do what is right in the midst of temptation and difficulty, we say he has much merit. Such conduct appears to be deserving of reward. Virtue and happiness ought to go together. We are satisified that under the government of God they will do so.

The idea of *merit* then is a primary and natural idea to the mind of man. It is not an afterthought to praise the doing of what is right from seeing that it is beneficial, but a spontaneous sentiment indissolubly connected with our idea of what is right, a sentiment guaranteed as to its truthfulness by the structure of the human mind and the character of God.

—See Price, *Review*, ch. 4.

The scholastic distinction between merit of congruity and merit of condignity is thus stated by Hobbes (Of Man, pt. i. ch. 14):—"God Almighty having promised paradise to those that can walk through this world according to the limits and precepts prescribed by Him; they say, he that shall so walk, shall merit paradise ex congruo." But because

MERIT-

no man can demand a right to it by his own righteousness, or any other power in himself, but by the free grace of God only; they say, no man can merit paradise ex condigno."—V. VIRTUE.

MESMERISM—[The voluntary direction of a current of animal magnetism from an operator to a patient. Directed upon the eyes, it induces artificial sleep. It is of interest for purposes of mental philosophy, as affording facilities for studying the question of mental activity during sleep. It may also afford help in reaching some conclusions on the still undecided question as to the rest of the brain in sleep.—Ed.]

METAPHOR (μεταφοςίω, to transfer).—" A metaphor is the transferring of a word from its usual meaning, to an analogous meaning, and then employing it agreeably to such transfer."—Arist., Poet., cap. 21. For example: the usual meaning of evening is the conclusion of the day. But age too is a conclusion, the conclusion of human life. Now there being an analogy in all conclusions, we arrange in order the two we have alleged, and say, that "as evening is to the day, so is age to human life." Hence by an easy permutation (which furnishes at once two metaphors) we say alternately, that "evening is the age of the day," and that "age is the evening of life."—Harris, Philosoph. Arrange., p. 441.

"Sweet is primarily and properly applied to tastes; second-

arily and improperly (i.e., by analogy) to sounds.

"When the secondary meaning of a word is founded on some fanciful analogy, and especially when it is introduced for ornament's sake, we call this a metaphor, as when we speak of a ship's ploughing the deep; the turning up of the surface being essential indeed to the plough, but accidental only to

the ship."—Whately, Log., bk. iii. sec. 10.

"A metaphor differs from a simile in form only, not in substance. In a simile, the two subjects are kept distinct in the expression, as well as in the thought; in a metaphor they are kept distinct in the thought, but not in the expression. A hero resembles a lion; and upon that resemblance many similes have been founded by Homer and other poets. But let us invoke the aid of the imagination, and figure the hero to be a lion, instead of only resembling one; by that variation the simile is converted into a metaphor, which is supported

## METAPHOR-

by describing all the qualities of the lion that resemble those of the hero.—Arist., Rhet., lib. iii. cap. 4; Irving, English Composition, p. 172.—V. ANALOGY, ALLEGORY.

METAPHYSICS.—[That department of mental philosophy which is concerned with the speculative or transcendental problems. arising out of the facts of consciousness and of the outer world. It was at one time made to include psychology, which was named the lower metaphysics .- Ed. This word is commonly said to have originated in the fact that Tyrannion or Andronicus, the collectors and conservers of the works of Aristotle, inscribed upon a portion of them the words Τὰ μετὰ τὰ φυσικά. But a late French critic, Mons. Ravaisson (Essai sur la Metaphysique, tom. i. p. 40), says he has found earlier traces of this phrase, and thinks it probable that, although not employed by Aristotle himself, it was applied to this portion of his writings by some of his immediate disciples. Whether the phrase was intended merely to indicate that this portion should stand, or that it should be studied, after the physics, in the collected works of Aristotle, are the two views which have been taken. In point of fact, this portion does usually stand after the physics. But in the order of science or study, Aristotle said, that after physics should come mathematics. And Derodon (Proem, Metaphys.) has given reasons why metaphysics should be studied after logic, and before physics and other parts of philosophy. But the truth is that the preposition μετά means along with as well as after, and might even be translated above. In Latin metaphysica is synonymous with supernaturalia. And in English Shakespeare has used metaphysical as synonymous with supernatural.

. . . . . "Fate and metaphysical aid doth seem To have thee erowned."

Macbeth, Act i. scene 3.

Clemens Alexandrinus (Strom. i.) considered metaphysical as equivalent to supernatural; and is supported by an anonymous Greek commentator, whom Patricius has translated into Latin, and styles Philoponus.

But if  $\mu \epsilon \tau \alpha$  be interpreted, as it may, to mean along with, then metaphysics or metaphysical philosophy will be that philosophy which we should take along with us into physics, and into every other philosophy—that knowledge of causes and

principles which we should carry with us into every department of inquiry. Aristotle called it the governing philosophy, which gives laws to all, but receives laws from none (Metaphys., lib. i. cap. 2). Lord Bacon has limited its sphere, when he says, "The one part (of philosophy) which is physics inquireth and handleth the material and efficient causes; and the other which is mctaphysic handleth the formal and final cause."—(Advancement of Learning, bk. ii.)\* But all causes are considered by Aristotle in his writings which have been entitled metaphysics. The inquiry into causes was called by him the first philosophy-science of truth, science of being. It has for its object—not those things which are seen and temporal-phenomenal and passing, but things not seen and eternal, things supersensuous and stable. It investigates the first principles of nature and of thought, the ultimate causes of existence and of knowledge. It considers things in their essence, independently of the particular properties or determined modes which make a difference between one thing and another. In short, it is ontology or the science of being as being, that is, not the science of any particular being or beings, such as animals or vegetables, lines or numbers, but the science of being in its general and common attributes. There is a science of matter and there is a science of mind. But metaphysics is the science of being as common to both.

"The subject of metaphysics is the whole of things. This cannot be otherways known than in its principles and causes. Now these must necessarily be what is most general in nature; for it is from generals that particulars are derived, which cannot exist without the generals; whereas the generals may exist without the particulars. Thus, the species, man, cannot exist without the genus, animal; but animal may be

<sup>\*</sup> In another passage, however, Bacon admits the advantage, if not the validity, of a higher metaphysic than this. "Because the distributions and partitions of knowledge are not like several lines that meet in one angle, and so touch but in a point, but are like branches of a tree that meet in a stem, which hath a dimension and quantity of entireness and continuance, before it come to discontinue and break itself into arms and boughs; therefore, it is good to erect and constitute one universal science by the name of 'philosophia prima,' primitive or summary philosophy, as the main and common way, before we come where the ways part and divide themselves; which seience, whether I should report deficient or no, I stand doubtful." Except in so far as it proceeded by observation rather than by speculation à priori, even this science would have been but lightly esteemed by Baeon.

without man. And this holds universally of all genuses and species. The subject therefore of metaphysics, is what is principal in nature, and first, if not in priority of time, in dignity and excellence, and in order likewise, as being the causes of everything in the universe. Leaving, therefore, particular subjects, and their several properties, to particular sciences, this universal science compares these subjects together; considers wherein they differ and wherein they agree: and that which they have in common, but belongs not, in particular, to any one science, is the proper object of metaphysics."—Monboddo, Ancient Metaphys., bk. iii. ch. 4.

Metaphysics is the knowledge of the one and the real in opposition to the many and the apparent (Arist., Metaphys., lib. iii. ch.[2). Matter, as perceived by the senses, is a combination of distinct and heterogeneous qualities, discernible, some by sight, some by smell, &c. What is the thing itself, the subject and owner of these several qualities, and yet not identical with any one of them? What is it by virtue of which those severable attributes constitute or belong to one and the same thing? Mind presents to consciousness so many distinct states, and operations, and feelings. What is the nature of that one mind, of which all these are so many modifications? The inquiry may be carried higher still, can we attain to any single conception of being in general, to which both mind and matter are subordinate, and from which the essence of both may be deduced?—Wolf, Philosoph. Ration. Disc. Prelim., sec. 73; Mansel, Prolegom. Log., p. 277.

"Aristotle said every science must have for investigation a determined province and separate form of being, but none of these sciences reaches the conception of being itself. Hence there is needed a science which should investigate that which the other sciences take up hypothetically, or through experience. This is done by the first philosophy, which has to do with being as such, while the other sciences relate only to determined and concrete being. The metaphysics, which is this science of being and its primitive grounds, is the first philosophy, since it is pre-supposed by every other discipline. Thus, says Aristotle, if there were only a physical substance, then would physics be the first and the only philosophy; but if there be an immaterial and unmoved essence which is the

ground of all being, then must there be also an antecedent, and because it is antecedent, a universal philosophy. The first ground of all being is God, whence Aristotle occasionally gives to the first philosophy the name of theology."—Schwegler,

Hist. of Philos., p. 112.

Metaphysics was formerly distinguished into general and special. The former was called Ontology—or the science of being in general, whether infinite or finite, spiritual or material; and explained therefore the most universal notions and attributes common to all beings—such as entity, nonentity, essence, existence, unity, identity, diversity, &c. This is metaphysics properly so called. Special metaphysics was sometimes called Pneumatology, and included—1. Natural Theology, or Theodicy; 2. Rational Cosmology, or the science of the origin and order of the world; and 3. Rational Psychology, which treated of the nature, faculties, and destiny of the human mind.

The three objects' of special metaphysics, viz., God, the world, and the human mind, correspond to Kant's three ideas of the pure reason. According to him, a systematic exposition of those notions and truths, the knowledge of which is altogether independent of experience, constitutes the science of meta-

physics.

"Time was," says Kant (Preface to the first edition of the Crit. of Pure Reason), "when metaphysics was the queen of all the sciences; and if we take the will for the deed, she certainly deserves, so far as regards the high importance of her object matter, this title of honour. Now, it is the fashion of the time to heap contempt and scorn upon her; and the matron mourns, forlorn and forsaken, like Hecuba—

'Modo, maxima rerum, Tot generis, natisque potens, Nune trahor exul, inops.'"

According to D'Alembert (Melanges, tom. iv. p. 143), the aim of metaphysics is to examine the generation of our ideas, and to show that they all come from sensations. This is the ideology of Condillac and De Tracy.

Mr. Stewart (Dissert., part ii. p. 475) has said that "Meta-physics was a word formerly appropriated to the ontology and pneumatology of the schools, but now understood as equally

applicable to all those inquiries which have for their object, to trace the various branches of human knowledge to their first principles in the constitution of the human mind." And in the Preface to the Dissert., he has said that by metaphysics he understands the "inductive philosophy of the human mind." In this sense the word is now popularly employed to denote, not the rational psychology of the schools, but psychology, or the philosophy of the human mind prosecuted according to the inductive method. In consequence of the subtle and insoluble questions prosecuted by the schoolmen, under the head of metaphysics, the word and the inquiries which it includes have been exposed to ridicule.\*

But there is and must be a science of being, otherwise there is and can be no science of knowing.

"If by metaphysics we mean those truths of the pure reason which always transcend, and not seldom appear to contradict the understanding, or (in the words of the great apostle) spiritual verities which can only be spiritually discerned, and this is the true and legitimate meaning of metaphysics,  $\mu\epsilon\tau\dot{\alpha}$   $\tau\dot{\alpha}$   $\psi\nu\sigma\iota\dot{\alpha}\dot{\alpha}$ , then I affirm, that this very controversy between the Arminians and the Calvinists (as to grace), in which both are partially right in what they affirm, and both wholly wrong in what they deny, is a proof that without metaphysics there can be no light of faith."—Coleridge, Notes on Eng. Div., vol. i. p. 340.

In French the word metaphysique is used as synonymous with philosophie, to denote the first principles, or an inquiry

\*The word metaphysics was handled by Rev. Sydney Smith (Elementary Sketches of Moral Philosophy, ch. 1, p. 3) with as much caution as if it had been a hand-grenade.

"There is a word," he exclaimed, when lecturing, with his deep, sonorous, warning voice, "of dire sound and horrible import, which I would fain have kept concealed if I possibly could, but as this is not feasible, I shall even meet the danger at once, and get out of it as well as I can. The word to which I allude is that very tremendous one of "metaphysics," which in a lecture on moral philosophy, seems likely to produce as much alarm as the cry of 'fire' in a crowded playhouse; when Belvidera is left to cry by herself, and every one saves himself in the best manner he can. I must beg of my andience, however, to sit quiet, and in themeantime to make use of the language which the manager would probably adopt on such an occasion: I can assure ladies and gentlemen there is not the smallest degree of danger."

The blacksmith of Glamis' description of metaphysics was—"Twa folk disputin' thegither; he that's listenin' disna ken what he that's speakin' means, and he that's speakin' disna ken what he means himsel'—that's metaphysics."

Another said—"God forbid that I should say a word against metaphysics, only, if a man should try to see down his throat, with a lighted candle in his hand, let him take care lest he set his head on fire."

into the first principles of any science.—La Metaphysique du Droit, La Metaphysique du Moral, &c. It is the same in German.

METEMPSYCHOSIS (μετά, beyond; ἐμψυχόω, to animate), is the transmigration or passage of the soul from one body to another. "We read in Plato, that from the opinion of metempsychosis, or transmigration of the souls of men into the bodies of beasts most suitable unto their human condition, after his death, Orpheus the musician became a swan."—Browne, Vulgar Errors, bk. iii. ch. 27.

This doctrine implies a belief in the pre-existence and immortality of the soul. And, according to Herodotus (lib. ii. sec. 123), the Egyptians were the first to espouse both doctrines. They believed that the soul at death entered into some animal created at the moment; and that after having inhabited the forms of all animals on earth, in the water, or in the air, it returned at the end of three thousand years into a human body, to begin anew a similar course of transmigration. (Among the inhabitants of India the transmigration of the soul was more nearly allied to the doctrine of emanation—q.v.) The common opinion is, that the doctrine of transmigration passed from Egypt into Greece. But, before any communication between the two countries, it had a place in the Orphic mysteries. Pythagoras may have given more precision to the doctrine. It was adopted by Plato'and his followers, and was secretly taught among the early Christians, according to one of St. Jerome's letters. The doctrine, when believed, should lead to abstaining from flesh, fish, or fowl, and this, accordingly. was one of the fundamental injunctions in the religion of Brahma, and in the philosophy of Pythagoras. The Satire of Limonedes on this subject is translated in the Spectator. No. 209.—Irhovius (Gul.) De Palingenesia veterum, seu Metemphychosi Pythagorica, lib. iii. 4to, Amst. 1733.

METHOD (μέθοδος, μετά and όδός), means the way or path by which we proceed to the attainment of some object or aim. In its widest acceptation, it denotes the means employed to obtain some end. Every art and every handicraft has its method. Cicero translates μέθοδος by via, and couples it with ars.—(Brutus, cap. 12. Compare De Finibus, ii. 1, and also De Orat., i. 19).

#### METHOD-

Scientific or philosophical method is the march which the mind follows in ascertaining or communicating truth [and is to be distinguished from the order in which things are enu-

merated].

Method may be called, in general, the art of disposing well a series of many thoughts, either for the discovering truth when we are ignorant of it, or for proving it to others when it is already known. Thus there are two kinds of method, one for discovering truth, which is called analysis, or the method of resolution, and which may also be called the method of invention; and the other for explaining it to others when we have found it, which is called synthesis, or the method of composition, and which may also be called the method of doctrine.—Port Roy. Logic, part iv. ch. 2.

"Method, which is usually described as the fourth part of Logic, is rather a complete practical Logic. It is rather a power or spirit of the intellect, pervading all that it does, than its tangible product."—Thomson, Outline of Laws of Thought,

sec. 119.

Every department of philosophy has its own proper method; but there is a universal method or science of method. was called by Plato, dialectic; and represented as leading to the true and the real.—(Repub. lib. vii.) It has been said that the word μέθοδος, as it occurs in Aristotle's Ethics, should be translated "system," rather than "method."—(Paul, Analysis of Aristotle's Ethics, p. 1.) But the construction of a system implies method. And no one was more thoroughly aware of the importance of a right method than Aristotle. He has said (Metaphys., lib. ii), "that we ought to see well what demonstration (or proof) suits each particular subject; for it would be absurd to mix together the research of science and that of method; two things, the acquisition of which offers great difficulty." The deductive method of philosophy came And the inductive method at once finished from his hand. was more extensively and successively followed out by him than has been generally thought.

James Acontius, or Concio, as he is sometimes called, was born at Trent, and came to England in 1567. He published a work, De Methodo, of which Mons. Degerando (Hist. Compar. des Systemes de Philosophie, part ii. tom. ii. p. 3) has given

## METHOD—

an analysis. According to him all knowledge deduced from a process of reasoning presupposes some primitive truths, founded in the nature of man, and admitted as soon as announced; and the great aim of method should be to bring these primitive truths to light, that by their light we may have more light. Truths obtained by the senses, and by repeated experience, become at length positive and certain knowledge.

Descartes has a discourse on *Method*. He has reduced it to four general rules.

I. To admit nothing as true of which we have not a clear and distinct idea. II. To divide every object inquired into as much as possible into its parts. III. To ascend from simple ideas or cognitions to those that are more complex. IV. By careful and repeated enumeration to see that all the parts are reunited.

This method begins with provisory doubt, proceeds by analysis and synthesis, and ends by accepting evidence in proportion as it resembles the evidence of self-consciousness.

In some sciences the principles or laws are given, and the object of the science is to discover the possible application of them. In these sciences the *method* is deductive, as in geometry. In other sciences, the facts or phenomena are given, and the object of the science is to discover the principles or laws. In these sciences the proper *method* is inductive, proceeding by observation or experiment, as in psychology and physics. The *method* opposed to this, and which was long followed, was the constructive *method*; which, instead of discovering causes by induction, imagined or assigned them à *priori*, or *ex hypothesi*, and afterwards tried to verify them. This *method* is seductive and bold but dangerous and insecure, and should be resorted to with great caution.

The use of method, both in obtaining and applying know-ledge for ourselves, and in conveying and communicating it to others, is great and obvious. "Currenti extra viam, quo habilior sit et velocior, eo majorem contingere aberrationem."—Nov. Org., i. 61. "Une bonne methode donne a l'esprit une telle puissance qu'elle peut en quelque sorte remplacer le talent. C'est un levier qui donne a l'homme faible, qui

## METHOD-

l'employe, une force que ne sauvait posséder l'homme le plus fort qui serait privé d'un semblable moyen."—Comte, *Traité de l'Legislation*, lib. i. cap. 1. La Place has said,—"La connaissance de la methode qui a guidé l'homme de genie, n'est pas moins utile au progres de la science, et meme a sa propre gloire, que ses decouvertes."

See Descartes, On Method; Coleridge, On Method, Introd.

to Encyclop. Metropol.; Friend, vol. iii.-V. System.

METHODOLOGY (Methodenlehre) is the transcendental doctrine of method. See Kant, Crit. of Pure Reason, p. 541, Haywood's translation, [Meiklejohn's, 431.] The elementary doctrine has been called by some Elementology, or the science treating

of the form of a metaphysical system.

METONOMY, METONYMY (μετα, over; ὁνομα, name) is a changing of names, as when, because of a recognized relation or dependence between them, we put one word for another. Thus the cause is put for the effect when I say, "I read Milton," that is, his writings; or the effect for the cause; as pale famine or cold death, because famine occasions paleness and death coldness.

MICROCOSM.—V. MACROCOSM.

MIND.—[Self-conscious Intelligence, possessing rational power of self-determination.—Ed.] Mind is that which moves, body is that which is moved.—Monboddo, Ancient Metaphys., bk. ii. ch. 3. See his remarks on the definition of Plato and Aristotle, ch. 4.

"By mind we mean something which, when it acts, knows what it is going to do; something stored with ideas of its intended works, agreeably to which ideas those works are

fashioned."—Harris, Hermes, p. 227.

"Mind, that which perceives, feels, thinks, and wills."-

Taylor, Elements of Thought.

"Among metaphysicians, mind is becoming a generic, and soul an individual designation. Mind is opposed to matter; soul to body. Mind is soul without regard to personality; soul is the appropriate mind of the being under notice. Etymologically, mind is the principle of volition, and soul the principle of animation. "I mean to go" was originally "I mind to go." Soul, at first identical with self, is from sellan, to say, the faculty of speech being its characteristic.

MIND-

"Dumb, and without a soul, beside such beauty, He has no mind to marry."—Taylor, Synonyms.

MIRACLE (miror, to wonder).—[An event which, without being a violation of the laws of nature, cannot be accounted for by these laws, but implies the operation of causal energy superior to their action. If the progress of science remove from the category of miracles events previously classified as such, it merely fulfils its proper function in so doing. The distinction between the marvellous and the miraculous only thereby becomes more marked.—Ed.] "A miracle I take to be a sensible operation, which being above the comprehension of the spectator, and, in his opinion, contrary to the established course of nature, is taken by men to be divine."—Locke, A Discourse of Miracles.

"A miracle," says Mr. Hume (Essay on Miracles), "is a violation of the laws of nature; and as a firm and unalterable experience has established these laws, the proof against a miracle, from the very nature of the fact, is as complete as any argument from experience can possibly be imagined; and if so, it is an undeniable consequence, that it cannot be surmounted by any proof whatever derived from human testimony."

Mr. Hume says the first hint of that argument occurred to him in a conversation with a Jesuit in the College of La Flêche. It has been replied to by Dr. Adams, Essay in Answer, &c.; Dr. Campbell, Dissert. on Miracles; Lemoine, A Treutise on Miracles, 8vo, Lond. 1747; Middleton (Convers), A Free Inquiry into Miraculous Powers, 1749; Douglas (Bishop), The Criterion, or Rules by which true Miracles are Distinguished, 8vo, Lond. 1754; Farmer, A Dissertation on Miracles, 8vo, Lond. 1771; Boehme (Christian Frederic), De Miraculis Enchiridion, 1805; De Quincey, Miracles a Subject of Testimony, vol. vi. Works, 1858.

MODALITY is the term employed to denote the most general points of view under which the different objects of thought present themselves to our mind. Now all that we think of we think of as possible, or contingent, or impossible or necessary. The possible is that which may equally be or not be, which is not yet, but which may be; the contingent is that which already is, but which might not have been; the necessary is

## MODALITY—

that which always is; and the impossible is that which never is. These are the modalities of being, which necessarily find a place in thought, and in the expression of it in judgments and in propositions. Hence arise the four modal propositions which Aristotle has defined and opposed (Heel Equippelas, ch. 12-14). He did not use the term modality, but it is to be found among his commentators and the scholastic philosophers. In the philosophy of Kant, our judgments are reduced under the four heads of quantity, quality, relation, and modality. In reference to modality they are either problematic, or assertory, or apodeictical. And hence the category of modality includes possibility and impossibility, existence and nonexistence, necessity or contingency. But existence and nonexistence should have no place; the contingent and the necessary are not different from being .- Dict. des Sciences Philosoph.

MODE.—"The manner in which a thing exists is called a mode or affection; shape and colour are modes of matter, memory and joy are modes of mind."-Taylor, Elements of Thought.

"Modes, I call such complex ideas, which, however compounded, contain not in them the supposition of subsisting by themselves, but are considered as dependencies on, or affections of, substances."-Locke, Essay on Hum. Under-

stand., bk. ii. ch. 12, sec. 4.

"There are some modes which may be called internal, because they are conceived to be in the substance, as round, square; and others which may be called external, because they are taken from something which is not in the substance, as loved, seen, desired, which are names taken from the action of another; and this is what is called in the schools an external denomination."-Port Roy. Logic, part i. ch. 2.

"Modes or modifications of mind, in the Cartesian school, mean merely what some recent philosophers express by states of mind; and include both the active and passive phenomena of the conscious subject. The terms were used by Descartes as well as by his disciples."—Sir William Hamilton, Reid's Works, p. 295, note.

Modes are secondary or subsidiary, as they could not be without substance, which exists by itself. Substances are not confined to any mode, but must exist in some. Modes are all

MODE-

variable conditions, and though some one is necessary to every substance, the particular ones are all accidental. *Modification* is properly the bringing of a thing into a *mode*, but is sometimes used to denote the *mode* of existence itself. *State* is a nearly synonymous but a more extended term than *mode*.

A mode is a variable and determinate affection of a substance, a quality which it may have or not, without affecting its essence or existence. A body may be at rest or in motion, a mind may affirm or deny, without ceasing to be. They are not accidents, because they arise directly from the nature of the substance which experiences them. Nor should they be called phenomena, which may have or not have their cause in the object which exhibits them. But modes arise from the nature of the substance affected by them. It is true that one substance modifies another, and in this view modes may sometimes be the effect of causes out of the substance in which they appear. They are then called modifications. Fire melts wax; the liquidity of wax in this view is a modification.

All beings which constitute the universe modify one another; but a soul endowed with liberty is the only being that modifies itself, or which can be altogether and in the same *mode*, cause and substance, active and passive.—*Dict*.

des Sciences Philosoph.

"That quality which distinguishes one genus, one species, or even one individual, from another, is termed a modification; then the same particular that is termed a property or quality, when considered as belonging to an individual, or a class of individuals, is termed a modification when considered as distinguishing the individual or the class from another; a black skin and soft curled hair, are properties of a negro; the same circumstances considered as marks that distinguish a negro from a man of different species, are denominated modifications."—Kames, Elements of Criticism, App.

MOLECULE (molecula, a little mass), is the smallest portion of matter cognizable by any of our senses. It is something real, and thus differs from atom, which is not perceived but conceived. It is the smallest portion of matter which we can reach by our means of dividing, while atom is the last

#### MOLECULE—

possible term of all division. When molecules are of simple homogeneous elements, as of gold or silver, they are called integrant; when they are of compound or heterogeneous elements, as salts and acids, they are called constituent.

MONAD, MONADOLOGY (μονάς, unity, one). - According to Leibnitz, the elementary particles of matter are vital forces not acting mechanically, but from an internal principle. They are incorporeal or spiritual atoms, inaccessible to all change from without, but subject to internal movement. This hypothesis he explains in a treatise entitled Monadologie. He thought incrt matter insufficient to explain the phenomena of body, and had recourse to the entelechies of Aristotle, or the substantial forms of the scholastic philosophy, conceiving of them as primitive forces, constituting the substance of matter, atoms of substance but not of matter, real and absolute unities, metaphysical points, full of vitality, exact as mathematical points, and real as physical points. These substantial unities which constitute matter are of a nature inferior to spirit and soul, but they are imperishable, although they may undergo transformation.

"Leibnitz conceived the whole universe, bodies as well as minds, to be made up of monads, that is, simple substances, each of which is, by the Creator, in the beginning of its existence, endowed with certain active and perceptive powers. A monad, therefore, is an active substance, simple, without parts or figure, which has within itself the power to produce all the changes it undergoes from the beginning of its existence to eternity. The changes which the monad undergoes, of what kind soever, though they may seem to us the effect of causes operating from without, are only the gradual and successive evolutions of its own internal powers, which would have produced all the same changes and motions, although there had been no other being in the universe."—Reid, Intell.

Mr. Stewart (Dissert., part ii. note 1, p. 219), has said,—
"After studying, with all possible diligence, what Leibnitz has said of his monads in different parts of his works, I find myself quite incompetent to annex any precise idea to the word as he has employed it." The most intelligible passage which he quotes is the following (tom. ii. p. 50):—"A monad

Pow., essay ii. ch. 15.

MONAD, MONADOLOGY-

is not a material but a formal atom, it being impossible for a thing to be at once material and possessed of a real unity and indivisibility. It is necessary, therefore, to revive the obsolete doctrine of substantial forms (the essence of which consists in force), separating it, however, from the various

abuses to which it is liable."

"Monadology rests upon this axiom—Every substance is at the same time a cause, and every substance being a cause, has therefore in itself the principle of its own development: such is the monad; it is a simple force. Each monad has relation to all others; it corresponds with the plan of the universe; it is the universe abridged; it is, as Leibnitz says, a living mirror which reflects the entire universe under its own point of view. But every monad being simple, there is no immediate action of one monad upon another; there is, however, a natural relation of their respective development, which makes their apparent communication; this natural relation, this harmony which has its reason in the wisdom of the supreme director, is pre-established harmony."—Cousin, Hist.

Mod. Philosoph., vol. ii. p. 86.

MONISM, MONIST (μόνος, one)—"The philosophical Unitarians or Monists, reject the testimony of consciousness to the ultimate duality of the subject and object in perception, but they arrive at the unity of these in different ways. Some admit the testimony of consciousness to the equipoise of the mental and material phenomena, and do not attempt to reduce either mind to matter or matter to mind. They reject, however, the evidence of consciousness to their antithesis in existence, and maintain that mind and matter are only phenomenal modifications of the same common substance. This is the doctrine of absolute identity,—a doctrine of which the most illustrious representatives among recent philosophers are Schelling, Hegel, and Cousin. Others again deny the evidence of consciousness to the equipoise of the subject and object as co-ordinate and co-original elements; and as the balance is inclined in favour of the one relative or the other, two opposite schemes of psychology are determined. If the subject be taken as the foriginal and genetic, and the object evolved from it as its product, the theory of Idealism is established. On the other hand, if the object be sssumed as the original

# MONISM, MONIST-

and genetic, and the subject evolved from it as its product, the theory of Materialism is established."—Sir W. Hamilton, *Metaphysics*, lect. xvi.—V. DUALISM, DUALITY OF CONSCIOUSNESS.

MONOGAMY (μόνος, γάμος, one marriage), is the doctrine that one man should have only one wife, and a wife only one husband. It has also been interpreted to mean that a man or woman should not marry more than once.

MONOTHEISM (μόνος, θεός, one God, the belief in one God only. MOOD.—V. Syllogism.

MORAL (moralis, from mos, manner), [concerned with the nature of the laws of right conduct, with the knowledge of them, and with the application of them.—Ed.]

In reasoning, the word moral is opposed to demonstrative, and means probable [on the basis of the moral order of the universe]. Sometimes it is opposed to material, and in this sense it means mental, or that the object to which it is applied belongs to mind and not to matter. Thus we speak of moral science as distinguished from physical science.

It is also opposed to intellectual and to asthetie. Thus we distinguish between a moral habit and an intellectual habit, between that which is morally becoming and that which pleases the powers of taste.

Moral is opposed to positive. "Moral precepts are precepts, the reasons of which we see; positive precepts are precepts, the reasons of which we do not see. Moral duties arise out of the nature of the case itself, prior to external command; positive duties do not arise out of the nature of the case, but from external command; nor would they be duties at all, were it not for such command received from him whose creatures and subjects we are."—Butler, Analogy, part ii. ch. 1.

"A positive precept concerns a thing that is right because commanded; a moral precept respects a thing commanded because it is right. A Jew, for instance, was bound both to honour his parents, and also to worship at Jerusalem; but the former was commanded because it was right, and the latter was right because it was commanded."—Whately, Lessons on Morals.

MORAL FACULTY.—[The power of the mind by which we obtain our knowledge of moral law.—Ed.]—V. Conscience.

MORALITY.—[Every form of action embraced under the application of moral law.—Ed.] "To lay down, in their universal form, the laws according to which the conduct of a free agent ought to be regulated, and to apply them to the different situations of human life, is the end of morality."

"A body of moral truths, definitely expressed, and arranged according to their rational connection," is the definition of a "system of morality" by Dr. Whewell, On Systematic Morality,

lect. i.

"The doctrine which treats of factions as right or wrong

is morality."—Whewell, Morality, sec. 76.

"There in the world two classes of objects, persons and things. And these are mutually related to each other. There are relations between persons and persons, and between things and things. And the peculiar distinctions of moral actions, moral characters, moral principles, moral habits, as contrasted with the intellect and other parts of man's nature, lies in this, that they always imply a relation between two persons, not between two things."—Sewell, Christ. Morals, p. 339.

"Morality commences with, and begins in, the sacred distinction between thing and person. On this distinction all law, human and divine, is grounded."—Coleridge, Aids to Re-

flection, vol. i. p. 265.

"What the duties of morality are, the apostle instructs the believer in full, comprising them under the two heads of negative and positive; negative, to keep himself pure from the world; and positive, beneficence from loving-kindness, that is, love of his fellow-men (his kind) as himself. Last and highest come the spiritual, comprising all the truths, acts, and duties, that have an especial reference to the timeless, the permanent, the eternal, to the sincere love of the true as truth, of the good as good, and of God as both in one. It comprehends the whole ascent from uprightness (morality, virtue, inward rectitude) to godlikeness, with all the acts, exercises, and disciplines of mind, will, and affections, that are requisite or conducive to the great design of our redemption from the form of the evil one, and of our second creation or birth in the divine image.

"It may be an additional aid to reflection, to distinguish the three kinds severally, according to the faculty to which each corresponds, the part of our human nature which is

## MORALITY-

more particularly its organ. Thus, the prudential corresponds to the sense and the understanding; the moral, to the heart and the conscience; the spiritual, to the will and the reason, that is, to the finite will reduced to harmony with, and in subordination to, the reason, as a ray from that true light which is both reason and will, universal reason and will absolute.

How nearly this scriptural division coincides with the Platonic, see PRUDENCE.—Coleridge, Aids to Reflection, vol. i. pp. 22, 23.

MORAL PHILOSOPHY is the science of human duty. [It is the philosophy of our knowledge of moral law, of the application of such law to human life, and of our relations as moral beings. -Ed.] The knowledge of human duty implies a knowledge of human nature. To understand what man ought to do, it is necessary to know what man is. Not that the moral philosopher, before entering upon those inquiries which peculiarly belong to him, must go over the science of human nature in all its extent. But it is necessary to examine those elements of human nature which have a direct bearing upon human conduct. A full course of moral philosophy should consist, therefore, of two parts—the first containing an analysis and illustration of those powers and principles by which man is prompted to act, and by the possession of which, he is capable of acting under a sense of duty; the second, containing an arrangement and exposition of the duties incumbent upon him as the possessor of an active and moral nature. As exhibiting the facts and phenomena presented by an examination of the active and moral nature of man, the first part may be characterized as psychological; and as laving down the duties arising from the various relations in which man, as a moral agent, has been placed, the second part may be designated as deontological.

"The moral philosopher has to investigate the principles according to which men act—the motives which influence them in fact—the objects at which they commonly aim—the passions, desires, characters, manners, tastes, which appear in the world around him, and in his own constitution. Further, as in all moral actions, the intellectual principles are implicated with the feelings, he must extend his inquiry to the

MORAL PHILOSOPHY-

phenomena of the mental powers, and know both what they are in themselves, and how they are combined in actions with the feelings."—Hampden, *Introd. to Mor. Phil.*, lect. vi. p. 187.—V. Ethics.

MORAL SENSE.—[Used, 1. to describe the moral faculty, when a transition was occurring from an emotional to an intellectual theory of its nature.—Shaftesbury, Hutcheson. 2. Feeling of reverence toward moral law.—Kant, Analy. der Prak. Vern.; Metaph. of Ethics, Semple, 2d ed. Calderwood.—Ed.]

MORPHOLOGY (μος Φή, form; λόγος).—" The branch of botanical science which treats of the forms of plants is called morphology, and is now regarded as the fundamental department of

botany."—M'Cosh, Typical Forms, p. 23.

"The subject of animal morphology has recently been expanded into a form, strikingly comprehensive and systematic, by Mr. Owen."—Whewell, Supplem., vol. p. 140. So that morphology treats of the forms of plants and animals, or organized beings.

"Our morphology ought not to prejudice our teleology."

—Whewell.

MOTION (zivnous) is the continued change of place of a body, or of any parts of a body; for in the cases of a globe turning on its axis, and of a wheel revolving on a pivot, the parts of these bodies change their places, while the bodies themselves remain stationary.

Motion is either physical, that is, obvious to the senses, or

not physical, that is, knowable by the rational faculty.

Aristotle has noticed several kinds of *physical* motion. Change of place, as when a body moves from one place to another, remaining the same. Alteration or aliation, as when a body from being round, becomes square. Augmentation or diminution, as when a body becomes larger or smaller. All these are changes from one attribute to another, while the substance remains the same.

But body only moves because it is moved. And Aristotle traced all motion to impulses in the nature of things, rising from the spontaneous impulse of life, appetite, and desire, up to the intelligent contemplation of what is good.

As Heraclitus held that all things are continually changing, so Parmenides and Zeno denied the possibility of motion. The

## MOTION-

best reply to their subtle sophisms, was that given by Diogenes the Cynic, who walked into the presence of Zeno in refutation of them.

The notion of movement or motion, like that of extension, is acquired in connection with the exercise of the senses of sight and touch.

MOTIVE.—[Any desire, affection, or other internal force which impels to action. A mental impulse.—Ed.] "The deliberate preference by which we are moved to act, and not the object for the sake of which we act, is the principle of action; and desire and reason, which is for the sake of something, is the origin of deliberate preference."—Aristotle, Ethic., lib. vi.

Kant distinguishes between the subjective principle of appetition which he calls the mobile or spring (die Triebfeder), and the objective principle of the will, which he calls motive or determining reason (Beweggrund); hence the difference between subjective ends to which we are pushed by natural disposition, and objective ends, which are common to us with all beings endowed with reason.—Willm, Hist. de la Philosoph. Allemande, tom. i. p. 357.

This seems to be the difference expressed in French between

mobile and motif.

"A motive is an object so operating upon the mind as to produce either desire or aversion."—Lord Kames, Essay on Liberty and Necessity.

"By motive," said Edwards (Inquiry, part i. sec. 2), "I mean the whole of that which moves, excites, or invites the mind to volition, whether that be one thing singly, or many things conjunctly. Many particular things may concur and unite their strength to induce the mind; and when it is so, all together are, as it were, one complex motive. . . . Whatever is a motive, in this sense, must be something that is extant in the view or apprehension of the understanding, or perceiving faculty. Nothing can induce or invite the mind to will or act anything, any further than it is perceived, or is in some way or other in the mind's view; for what is wholly unperceived, and perfectly out of the mind's view, cannot affect the mind at all."

Hence it has been common [improperly] to distinguish

motives as external or objective, and as internal or subjective. Regarded objectively, motives are those external objects or circumstances, which, when contemplated, give rise to views or feelings which prompt or influence the will. Regarded subjectively, motives are those internal views or feelings which arise on the contemplation of external objects or circumstances. In common language, the term motive is applied indifferently to the external object, and to the state of mind, to which the apprehension or contemplation of it may give rise. The explanation of Edwards includes both. Dr. Reid said, that he "understood a motive, when applied to a human being, to be that for the sake of which he acts, and therefore that what he never was conscious of, can no more be a motive to determine his will, than it can be an argument to determine his judgment." \*- (Correspondence prefixed to his Works, p. 87). In his Essays on the Active Powers (essay iv. ch. 4), he said, "Everything that can be called a motive is addressed either to the animal or to the rational part of our nature." Here the word motive is applied objectively to those external things, which, when contemplated, affect our intelligence or our sensitivity. But, in the very next sentence, he has said, "motives of the former kind are common to us with the brutes." Here the word motive is applied subjectively to those internal principles of our nature, such as appetite, desire, passion, &c., which are excited by the contemplation of external objects, adapted and addressed to them.

But, in order to a more precise use of the term motive, let it be noted, that, in regard to it, there are three things clearly distinguishable, although it may not be common, nor easy, always to speak of them distinctively. These are, the external object, the internal principle, and the state or affection of mind resulting from the one being addressed to the other. For example, bread or food of any kind, is the external object, which is adapted to an internal principle which is called appetite, and hunger or the desire for food is the internal feeling, which is excited or allayed as the circumstances may be, by the presentment of the external object to the internal

<sup>\* &</sup>quot;This is Aristotle's definition (το ενεκα ου) of end or final cause; and as a synonym for end or final cause the term motive had been long exclusively employed."—Sir Will. Hamilton.

principle. In popular language, the term motive might be applied to any one of these three; and, it might be said, that the motive for such an action was bread, or appetite, or hunger. But, strictly speaking, the feeling of hunger was the motive: it was that, in the preceding state of mind, which disposed or inclined the agent to act in one way rather than in any other. The same may be said of motives of every kind. In every case there may be observed the external object, the internal principle, and the resultant state or affection of mind; and the term motive may be applied, separately and successively. to any one of them; but speaking strictly it should be applied to the terminating state or affection of mind which arises from a principle of human nature having been addressed by an object adapted to it; because, it is this state or affection of mind which prompts to action. The motive of an agent, in some particular action, may be said to have been injury, or resentment, or anger-meaning by the first of these words, the wrongous behaviour of another; by the second, the principle in human nature affected by such behaviour; and by the third, the resultant state of mind in the agent. When it is said that a man acted prudently, it may intimate that his conduct was in accordance with the rules of propriety and prudence; or, that he adopted it, after careful consideration and forethought, or, from a sense of the benefit and advantage to be derived from it. In like manner, when it is said that a man acted conscientiously, it may mean, that the particular action was regarded not as a matter of interest, but of duty, or, that his moral faculty approved of it as right, or, that he felt himself under a sense of obligation to do it. In all these cases, the term motive is strictly applicable to the terminating state or affection of mind, which immediately precedes the volition or determination to act.

To the question, therefore, whether motive means something in the mind or out of it, it is replied, that what moves the will is something in the preceding state of mind. The state of mind may have reference to something out of the mind. But what is out of the mind must be apprehended or contemplated—must be brought within the view of the mind, before it can in any one affect it. It is only in a secondary or remote sense, therefore, that external objects or circum-

stances can be called *motives*, or be said to move the will. *Motives* are, strictly speaking, *subjective*—as they are internal states or affections of mind in the agent.]

And motives may be called subjective, not only in contradistinction to the external objects and circumstances which may be the occasion of them, but also in regard to the different effect which the same objects and circumstances may have, not only upon different individuals, but even

upon the same individuals, at different times.

A man of slow and narrow intellect is unable to perceive the value or importance of any object when presented to him, or the propriety and advantage of a course of conduct that may be pointed out to him, so clearly or so quickly as a man of large and vigorous intellect. The cousequence will be, that with the same motives (objectively considered) presented to them, the one may remain indifferent and indolent in reference to the advantage held out, while the other will at once apprehend and pursue it. A man of cold and dull affections will contemplate a spectacle of pain or want, without feeling any desire or making any exertion to relieve it; while he whose sensibilities are more acute and lively, will instantly be moved to the most active and generous efforts. An injury done to one man will rouse him at once to a phreuzy of indignation, which will prompt him to the most extravagant measures of retaliation or revenge: while, in another man, it will only give rise to a moderate feeling of resentment. An action which will be contemplated with horror by a man of tender conscience, will be done without compunction by him whose moral sense has not been sufficiently exercised to discern between good and evil. In short, anything external to the mind will be modified in its effect, according to the constitution and training of the different minds within the view of which it may be brought.

And not only may the same objects differently affect different minds, but also the same minds, at different times, or under different circumstances. He who is suffering the pain of hunger may be tempted to steal in order to satisfy his hunger; but he who has bread enough and to spare, is under no such temptation. A sum of money which might be sufficient to bribe one man, would be no trial to the

honesty of another. Under the impulse of any violent passion, considerations of prudence and propriety have not the same weight as in calmer moments. The young are not so cautious, in circumstances of danger and difficulty, as those who have attained to greater age and experience. Objects appear to us in very different colours, in health and in sickness, in prosperity and in adversity, in society and in solitude, in prospect and in possession.

It would thus appear that motives are in their nature subjective, in their influence individual, and in their issue variable.

MYSTICISM has been derived from μύω, to shut up; hence μύστης, one who shuts up [or is initiated into articles of secret instruction. Mysticism is a term which includes under it all philosophical speculations on transcendent problems which break away from the facts of observation and experience, and which refuse the test presented by such facts.

—Ed.1

"The epithet sublime is strongly and happily descriptive of the feelings inspired by the genius of Plato, by the lofty mysticism of his philosophy, and even by the remote origin of the theological fables which are said to have descended to him from Orpheus."—Stewart, Philosoph. Essays, ii. ch. 5.

Mysticism in philosophy is the belief that God may be known face to face, without anything intermediate. It is a yielding to the sentiment awakened by the idea of the infinite, and a running up of all knowledge and all duty to the contemplation and love of him.—Cousin, Hist. de la Philosoph. Mod., première série tom, ii, leçon 9, 10.

Mysticism despairs of the regular process of science; it believes that we may attain directly, without the aid of the senses or reason, and by an immediate intuition, the real and absolute principle of all truth, God. It finds God either in nature, and hence a physical and naturalistic mysticism; or in the soul, and hence a moral and metaphysical mysticism. It has also its historical views; and in history it considers especially that which represents mysticism in full, and under its most regular form, that is religious; and is not to the letter of religions, but to their spirit, that it clings; hence an allegorical and symbolical mysticism. Van Helmont, Ames,

## MYSTICISM-

and Pordage, are naturalistic mystics; Poiret is moral, and Bourignon and Fenelon are Divine mystics. Swedenborg's

mysticism includes them all.

"Whether in the Vedas, in the Platonists, or in the Hegelians, mysticism is neither more nor less than ascribing objective existence to the subjective creations of our own faculties, to ideas or feelings of the mind; and believing that by watching and contemplating these ideas of its own making, it can read in them what takes place in the world without."—Mill, Log., bk. v. ch. iii. sec. 5.

The Germans have two words for mysticism; mystik and mysticismus. The former they use in a favourable, the latter in an unfavourable sense. Just as we say picty and pietism, or rationality and rationalism; keeping the first of each pair for use, the second for abuse.—Vaughan, Hours with the Mystics, vol. i. p. 23.

Cousin, Hist. of Mod. Philosoph., vol. ii. pp. 94-97; Schmidt (Car.), Essai sur les Mystiques de Quatorzicme siccle, Stras-

burg, 1836.

MYTH and MYTHOLOGY (μῦθος, a tale; λόγος).—[Myth is a fictitious or conjectural narrative, presented as historical.— Ed.] "I use this term (myth) as synonymous with 'invention,' having no historical basis."—Pococke, India in Grecce, p. 2, note.

The early history and the early religion of all nations are full of fables. Hence it is that myths have been divided into the traditional and the theological, or the historical and the religious.\*

A myth is a narrative framed for the purpose of expressing some general truth, a law of nature, a moral phenomenon, or a religious idea, the different phases of which correspond to the turn of the narrative. An allegory agrees with it in expressing some general idea, but differs from it in this,—that in the allegory the idea was developed before the form, which was invented and adapted to it. The allegory is a reflective and artificial process, the myth springs up spontane-

<sup>\*</sup> Among the early nations, every truth a little remote from common apprehension was embodied in their religious creed; so that this second class would contain myths concerning Deity, morals, physics, astronomy, and metaphysics. These last are properly called philosophemes.

# MYTH and MYTHOLOGY-

onsly and by a kind of inspiration. A symbol is a silent myth, which impresses the truths which it conveys not by successive stages, but at once  $(\sigma \dot{\nu} \nu, \beta \dot{\alpha} \lambda \lambda \omega)$  throws together significant images of some truth.

Plato has introduced the myth into some of his writings in a subordinate way, as in the Gorgias, the Republic, and the

Blackwell, Letters concerning Mythology, 8vo, Lond. 1748; Huttner, De Mythis Platonis, 4to, Leipsic, 1788; Bacon, On the Wisdom of the Ancients; Müller, Mythology, translated by Leitch, 1844.

On the philosophic value of myths, see Cousin, Cours, 1828; 1 and 15 leçons, and the Argument of his translation of Plato.

Some good remarks on the difference between the parable, the fable, the myth, &c., will be found in Trench, On the Parables, Introd.

On the different views taken of Greek mythology, see

Creuzer and Godfrey Hermann.

See an Essay on Comparative Mythology, in the Oxford Essays for 1856; Grote, Hist. of Greece, vol. i. p. 400; Baden, Pervill, Order of Nature, 340.

# NATURA.—V. NATURE.

NATURAL, [belonging to the constitution of things, or to the established order of the cosmos.—Ed.]—Natural as distinguished from Supernatural or Miraculous.—"The only distinct meaning of the word natural is stated, fixed, or settled; since what is natural as much requires and presupposes an intelligent agent to render it so, that is, to effect it continually or at stated times, as what is supernatural or miraculous does to effect it for once."—Butler, Analogy, part i. ch. 1.

Natural, as distinguished from Innate or Instinctive.

"There is a great deal of difference," said Mr. Locke (Essay on Hum. Understand., bk. i. ch. 3), "between an innate law, and a law of nature; between something imprinted on our minds in their very original, and something that we being ignorant of, may attain to the knowledge of by the use and application of our natural faculties. And I think they

### NATURAL-

equally forsake the truth who, running into contrary extremes, either affirm an *innate law*, or deny that there is a law knowable by the *light of nature*, without the help of positive revelation."

"Of the various powers and faculties we possess, there are some which nature seems both to have planted and reared, so as to have left nothing to human industry. Such are the powers which we have in common with the brutes, and which are necessary to the preservation of the individual, or to the continuance of the kind. There are other powers, of which nature hath only planted the seeds in our minds, but hath left the rearing of them to human culture.\* It is by the proper culture of these that we are capable of all those improvements in intellectuals, in taste, and in morals, which exalt and dignify human nature; while, on the the other hand, the neglect or perversion of them makes its degeneracy and corruption."—Reid, Inquiry, ch. 1, sec. 2.

"Whatever ideas, whatever principles we are necessarily led to acquire by the circumstances in which we are placed, and by the exercise of those faculties which are essential to our preservation, are to be considered as parts of human nature, no less than those which are implanted in the mind at its first formation."—Stewart, Act. and Mor. Pow., vol. i. p. 351.

"Acquired perceptions and sentiments may be termed natural, as much as those which are commonly so called, if they are as rarely found wanting."—Mackintosh, Prelimin. Dissert., p. 67.

NATURALISM is the name given to those systems of the philosophy of nature which explain the phenomena by a blind force acting necessarily. This doctrine is to be found in Lucretius, De Rerum Natura, and was held by Leucippus and Epicurus. The Systeme de la Nature of D'Holbach, the Traité de la Nature of Robinet, and the Philosophie de la Nature of Delisle de Sales, also contain it.

Naturalism in the fine arts is opposed to idealism. Of Albert Durer it is said that "he united to the brilliant delicacies of Flemish naturalism the most elevated and varied of Italian idealism."—Labarte, Handbook of the Middle Ages.

<sup>\*</sup> Yet Dr. Reid, when speaking of natural rights (Act. Pow., essay v. ch. 5) uses innate as synonymous with natural.

NATURE (nascor, to be born).—According to its derivation, nature should mean that which is produced or born; but it also means that which produces or causes to be born. The word has been used with various shades of meaning, but they may all be brought under two heads, Natura Naturans, and Natura Naturata.

1. Natura Naturans.—a. The author of nature, the uncreated Being who gave birth to everything that is. b. The plastic nature or energy subordinate to that of the Deity, by which all things are conserved and directed to their ends and uses. e. The course of nature, or the established order according to which the universe is regulated.

Alii naturam censent esse vim quandam sine Ratione, cientem motus in eorporibus necessarios; alii autem vim participem ordinis, tanquam via progredientem.—Cicero, De Nat. Deorum,

lib. ii.

II. Natura Naturata.—a. 1. The works of nature, both mind and matter. 2. The visible or material creation, as distinct from God and the soul, which is the object of natural science.

"The term nature is used sometimes in a wider, sometimes in a narrower extension. When employed in its most extensive meaning, it embraces the two worlds of mind and matter. When employed in its more restricted signification, it is a synonym for the latter only, and is then used in contradistinction to the former. In the Greek philosophy, the word φύσις was general in its meaning; and the great branch of philosophy, styled 'physical or physiological,' included under it not only the sciences of matter, but also those of mind. With us, the term nature is more vaguely extensive than the terms physics, physical, physiology, physiological, or even than the adjective, natural; whereas, in the philosophy of Germany, nature and its correlatives, whether of Greek or Latin derivation, are, in general, expressive of the world of matter in contrast to the world of intelligence."-Sir W. Hamilton, Reid's Works, p. 216, note.

b. Nature as opposed to art, all physical causes, all the forces which belong to physical beings, organic or inorganic.
c. The nature or essence of any particular being or class of

beings, that which makes it what it is.

"The word nature has been used in two senses,-viz.

actively and passively; energetic (= forma formans), and material ( = forma formata). In the first it signifies the inward principle of whatever is requisite for the reality of a thing as existent; while the essence, or essential property, signifies the inner principle of all that appertains to the possibility of a thing. Hence, in accurate language, we say the essence of a mathematical circle or geometrical figure, not the nature, because in the conception of forms, purely geometrical, there is no expression or implication of their real existence. In the second or material sense of the word nature, we mean by it the sum total of all things, as far as they are objects of our senses, and consequently of possible experience—the aggregate of phenomena, whether existing for our outer senses, or for our inner sense. The doctrine concerning nature, would therefore (the word physiology being both ambiguous in itself, and already otherwise appropriated) be more properly entitled phenomenology, distinguished into its two grand divisions, somatology\* and psychology."—Coleridge, Friend, p. 410.

what men commonly call the course of nature, or the power of nature. The course of nature, truly and properly speaking, is nothing else but the will of God producing certain effects in a continued, regular, constant, and uniform manner; which course or manner of acting, being in every movement perfectly arbitrary, is as easy to be altered at any time as to be preserved. And if (as seems most probable), this continual acting upon matter be performed by the subserviency of created intelligences appointed for that purpose by the Supreme Creator, then it is easy for any of them, and as much within their natural power (by the permission of God), to alter the course of nature at any time, or in any respect, as it is to preserve or continue it."—Clarke, Evidences of Nat. and Revealed Religion, p, 300, 4th ed.

"All things are artificial," said Sir Thomas Browne, "for nature is the art of God." The antithesis of nature and art is a celebrated doctrine in the peripatetic philosophy. Natural things are distinguished from artificial, inasmuch as they have

<sup>\*</sup> Both these are included in the title of a work which appeared more than thirty years ago,—viz., Somatopsychonologia.

what the latter are without, and intrinsic principle of formation."—Arist., De Gen. Anim., ii. cap. 1.

"Nature," said Dr. Reid (Act. Pow., essay i. ch. 5), "is the name we give to the efficient cause of innumerable effects which fall daily under observation. But if it be asked what nature is? whether the first universal cause \* or a subordinate one? whether one or many? whether intelligent or unintelligent?—upon these points we find various conjectures and theories, but no solid ground upon which we can rest. And I apprehend the wisest men are they who are sensible that they know nothing of the matter."

The Hon. Robert Boyle wrote an Enquiry into the vulgarly received notion of Nature, in which he attempted to show the absurdity of interposing any subordinate energy between the Creator and His works, 12mo, Lond. 1785.

Nature or Force (Plastic) (πλάσσω, to form), was the name given by ancient physiologists to a power to which they attributed the formation of the germs and tissues of organized and living beings. In opposition to the doctrine of Democritus, who explained all the phenomena of nature by means of matter and motion, and in opposition to the doctrine of Strato, who taught that matter was the only substance, but in itself a living and active force, Cudworth maintained that there is a plastic nature, a spiritual energy, intermediate between the Creator and His works, by which the phenomena of nature are produced. To ascribe these phenomena to the immediate agency of Deity would be, he thought, to make the course of nature miraculous; and he could not suppose the agency of the Deity to be exerted directly, and vet monstrosities and defects to be found in the works of nature. How far the facts warrant such an hypothesis, or how far such an hypothesis explains the facts, may be doubted. But the hypothesis is not much different from that of the anima mundi, or soul of matter, which had the countenance of Pythagoras and Plato, as well as of the school of Alexandria, and later philosophers.—V. Anima Mundi, Plastic Medium. Nature (Philosophy of) .- The philosophy of nature includes all

\* Natura est principium et causa efficiens omnium rerum naturalium, quo sensu a veteribus philosophis cum Deo confundebatur.—Cicero, De Nat. Deor., lib. i. cap. 8, and lib. ii. cap. 22, 32.

the attempts which have been made to account for the origin and ongoings of the physical universe. Some of these have been noticed under Matter. And for an account of the various Philosophies of nature, see T. H. Martin, Philosophie Spiritualiste de la Nature, 2 tom., Paris, 1849; J. B. Stallo, A.M., General Principles of Philosoph. of Nature, Lond. 1848.

NATURE (Law of).—By the law of Nature is meant that law of justice and benevolence which is written on the heart of every man, and which teaches him to do to others as he would wish that they should do unto him. It was long called the law of nature and of nations, because it is natural to men of all nations.\* But by the phrase law of nations is now meant international law, and by the law of nature, natural law. It is not meant by the phrase that there is a regular system or code of laws made known by the light of nature in which all men everywhere acquiesce, but that there are certain great principles universally acknowledged, and in accordance with which men feel themselves bound to regulate their conduct.

"Why seek the law or rule in the world! What would you answer when it is alleged to be within you, if you would only listen to it? You are like a dishonest debtor who asks for the bill against him when he has it himself. Quod petis intus habes. All the tables of the law, the two tables of Moses, the twelve tables of the Romans, and all the good laws in the world, are but copies and extracts, which will be produced in judgment against thee who hidest the original and pretendest not to know what it is, stiffing as much as possible that light which shines within thee, but which would never have been without and humanly published but that that which was within, all celestial and divine, had been contemned and forgotten."—Charron, De la Sagesse, liv. ii. cap. 3, No. 4.

According to Grotius, "Jus Naturale est dictatum rectæ rationis, indicans, actui alicui, ex ejus convenientia, vel disconvenientia cum ipsa natura rationali, inesse moralem turpitudinem, aut necessitatem moralem; et consequenter ab authore natura, ipso Deo, talem actum aut vetari aut præcipi."

<sup>\*</sup> Quod naturalis ratio inter omnes homines constituit, id apud omnes populos peræque custoditur, vocaturque jus gentium; quasi quo jure omnes gentes utuntur.— Gaius.

"Jus gentium is used to denote, not international law, but positive or instituted law, so far as it is common to all nations. When the Romans spoke of international law, they termed it Jus Feeiale, the law of heralds, or international envoys."—Whewell, Morality, No. 1139.

Selden, De Jure Naturali, lib. i. cap. 3; Grotius, De Jure Belli et Paeis, Prolegom., sec. 5, 6, lib. i. cap. 1, sec. 10; Puffendorff, De Officio Hominis et Civis, lib. iii. cap. 3; Sanderson, De Oblig. Conscientiæ, Prælect. Quarta, sec. 20–24; Tyrell, On Law of Nature; Culverwell, Discourse of the Light of Nature.

NATURE (of Things), [Foundation of Virtue.]—The following may be given as an outline of the views of those philosophers, Cudworth, Clarke, Price, and others, who place the foundation of virtue in the nature, reason, and fitness of things:—

"Everything is what it is, by having a nature. As all things have not the same nature, there must be different relations, respects, or proportions, of some things towards others, and a consequent fitness or unfitness, in the application of different things, or different relations, to one another. It is the same with persons. There is a fitness, or suitableness of certain circumstances to certain persons, and unsuitableness of others. And from the different relations of different persons to one another, there necessarily arises a fitness or unfitness of certain manners of behaviour of some persons towards others, as well as in respect to the things and circumstances with which they are surrounded. Now, we stand in various relations to God, as our Creator, our Preserver, our Benefactor, our Governor, and our Judge. We cannot contemplate these relations, without seeing or feeling a Rectitude or Rightness in cherishing certain affections and discharging certain services towards Him. and a Wrongness in neglecting to do so, or in manifesting a different disposition, or following a different course of action. We stand, also, in various relations to our fellow-creatures: some of them inseparable from our nature and condition as human beings, such as the relations of parent and child. brother and friend; and others which may be voluntarily established, such as the relations of husband and wife, master and servant. And we cannot conceive of these relations without at the same time seeing a Rectitude or Rightness in

### NATURE—

cherishing suitable affections and following a suitable course of action. Not to do so we see and feel to be Wrong. We may even be said to stand in various relations to the objects around us in the world; and, when we contemplate our nature and condition, we cannot fail to see, in certain manners of behaviour, suitableness or unsuitableness to the circumstances in which we have been placed. Now, Rectitude or conformity with those relations which arise from the nature and condition of man, is nothing arbitrary or fictitious. It is founded in the nature of things. God was under no necessity to create human beings. But, in calling them into existence, he must have given them a nature, and thus have constituted the relations in which they stand to Him and to other beings. There is a suitableness or congruity between these relations and certain manners of behaviour. Reason, or the Moral Faculty, perceives and approves of this suitableness or congruity. The Divine mind must do the same, for the relations were constituted by God; and conformity to them must be in accordance with His will. So that Conscience, when truly enlightened, is a ray from the Divine Reason; and the moral law, which it reveals to us, is Eternal and Immutable as the nature of God and the nature of things."—Manual of Mor. Phil., p. 124. [Fleming.]

NATURE (Human).—As to the different senses in which nature may be understood, and the proper meaning of the maxim, Follow nature,—see Butler, Three Sermons on Hum. Nature.

NECESSITY (ne and cesso, that which cannot cease).—[The philosophic uses of this term are various:—1. Physical necessity, according to the laws of nature, invariable sequence.

2. Intellectual necessity, according to the laws of our intelligence; and 3. Moral necessity, according to the absolute requirements of moral law. As applied to the question of the philosophy of the human will, Necessity expresses the doctrine that the will is not free, but that all volitions follow by invariable sequence from internal motives, as the facts of nature from natural law. The word Determinism has been proposed by J. S. Mill, as preferable to Necessitarianism.—Ed.] "I have one thing to observe of the several kinds of necessity, that the idea of some sort of firm connection runs through them all:—and that is the proper general import of

### NECESSITY-

the name necessity. Connection of mental or verbal propositions, or of their respective parts, makes up the idea of logical necessity,—connection of end and means makes up the idea of moral necessity,—connection of causes and effects is physical necessity, and connection of existence and essence is metaphysical necessity."—Waterland, Works, vol. iv. p. 432.

Logical nccessity is that which, according to the terms of the proposition, cannot but be. Thus it is necessary that man be a rational animal, because these are the terms in which he is defined.

Moral necessity is that without which the effect cannot well be, although, absolutely speaking it may. A man who is lame is under a moral [!] necessity to use some help, but absolutely

he may not. "The phrase moral necessity is used variously; sometimes it is used for necessity of moral obligation. So we say a man is under necessity, when he is under bonds of duty and conscience from which he cannot be discharged. Sometimes by moral necessity is meant that sure connection of things that is a foundation for infallible certainty. In this sense moral necessity signifies much the same as that high degree of probability, which is ordinarily sufficient to satisfy mankind in their conduct and behaviour in the world. Sometimes by moral necessity is meant that necessity of connection and consequence which arises from such moral causes as the strength of inclination or motives, and the connection which there is in many cases between them, and such certain volitions and actions. It is in this sense that I use the phrase moral necessity in the following discourse."-Edwards, Works, vol. i. p. 116.

"By natural (or physical) ncccssity, as applied to men, I mean such necessity as men are under through the force of natural causes. Thus men placed in certain circumstances, are the subjects of particular sensations by necessity; they feel pain when their bodies are wounded; they see the objects placed before them in a clear light, when their eyes are opened: so they assent to the truths of certain propositions as soon as the terms are understood; as that two and two make four, that black is not white, that two parallel lines can never cross one another; so by a natural (a physical) necessity men's

### NECESSITY-

bodies move downwards when there is nothing to support

them."—Edwards, Works, vol. i. p. 146.

Necessity is characteristic of ideas and of aetions. A necessary idea is one the contrary of which cannot be entertained by the human mind; as every change implies a cause. Necessity and universality are the marks of certain ideas which are native to the human mind, and not derived from experience. A necessary action is one the contrary of which is impossible. Necessity is opposed to freedom, or to free-will.

# NECESSITY (Doctrine of).

"There are two schemes of necessity—the necessitation by efficient—the necessitation by final causes. The former is brute or blind fate; the latter rational determinism. Though their practical results be the same, they ought to be carefully distinguished."—Sir W. Hamilton, Reid's Works, p. 87, note.

Leibnitz, in his Fifth Paper to Dr. Clarke, p. 157, distinguishes between—

1. Hypothetical necessity, as opposed to absolute necessity, as that which the supposition or the hypothesis of God's foresight and pre-ordination lays upon future contingents.

2. Logical, metaphysical, or mathematical necessity, which takes place because the opposite implies a contradiction; and

3. Moral necessity, whereby a wise being chooses the best, and every mind follows the strongest inclination.

Dr. Clark replies, p. 287, "Necessity, in philosophical questions, always signifies absolute necessity. Hypothetical necessity and moral necessity are only figurative ways of speaking, and in philosophical strictness of truth, are no necessity at all. The question is not, whether a thing must be, when it is supposed that it is, or that it is to be (which is hypothetical necessity). Neither is the question whether it be true, that a good being, continuing to be good, cannot do evil; or a wise being, continuing to be wise, cannot act unwisely; or a veracious person, continuing to be veracious, cannot tell a lie (which is moral necessity). But the true and only question in philosophy concerning liberty, is, whether the immediate physical cause, or principle of action be indeed in him whom we call the agent; or whether it be some other reason, which

### NECESSITY-

is the real eause by operating upon the agent, and making him to be not indeed an agent, but a mere patient."

# NECESSITY (Logical).

"The scholastic philosophers have denominated one species of necessity—necessitas consequentiae, and another—necessitas consequentis. The former is an ideal or formal necessity; the inevitable dependence of one thought upon another, by reason of our intelligent nature. The latter is a real or material necessity; the inevitable dependence of one thing upon another because of its own nature. The former is a logical necessity, common to all legitimate consequence, whatever be the material modality of its objects. The latter is an extra-logical necessity, over and above the syllogistic inference, and wholly dependent upon the modality of the consequent. This ancient distinction modern philosophers have not only overlooked but confounded. (See contrasted the doctrines of the Aphrodisian, and of Mr. Dugald Stewart, in Dissertations on Reid, p. 701, note).—Sir William Hamilton, Discussions, p. 144.

**NEGATION** (nego, to deny), is [the denial of existence, or the affirmation of] the absence of that which does not naturally belong to the thing we are speaking of.

According to Thomas Aquinas (Summa, p. i. qu. 48, art. 5) simple negation denies to a thing some certain realities which do not belong to the nature of the same. Privation, on the contrary, is deficiency in some reality which belongs to the notion of the being.

NEGATIVE THINKING.—In simple apprehension there is no affirmation or denial, so that, strictly speaking, there are no negative ideas, notions, or conceptions. In truth, some that are so called represent the most positive realities; as infinity, immensity, immortality, &c. But in some ideas, as in that of blindness, deafness, insensibility, there is, as it were, a taking away of something from the object of which these ideas are entertained. But this is privation (στέρησις) rather than negation (ἀπόφασις). And in general it may be said that negation implies some anterior conception of the object of which the negation is made. Absolute negation is impossible. We have no idea of nothing. It is but a word.—Diet. des Sciences Philosoph. [Sir W. Hamilton makes our notion of the Infinite "a negative notion (the concept of a thing by

## NEGATIVE THINKING—

what it is not)." Discussions, p. 28; Lects. ii. 373. The position is vindicated, Letter to Calderwood, lect. ii. 534. See also Mansel, Proleg. Logica and Limits of Religious Thought, lect. iii. p. 45. In opposition to this view, Calderwood's Philos. of the Infinite, 2d and 3d ed. p. 272; Young's Province of Reason, 99; Bolton, Inquisitio Philosophica, 182; Porter, The Human Intellect, 531 and 652.—Ed.]

NIHILISM (nihil, nihilum, nothing), is scepticism carried to the

denial of all existence.

"The sum total," says Fichte, "is this. There is absolutely nothing permanent either without me or within me, but only an unceasing change. I know absolutely nothing of any existence, not even of my own. I myself know nothing, and am nothing. Images (Bilder) there are; they constitute all that apparently exists, and what they know of themselves is after the manner of images; images that pass and vanish without there being aught to witness their transition; that consist in fact of the images of images, without significance and without an aim. I myself am one of these images; nay, I am not even thus much, but only a confused image of images. All reality is converted into a marvellous dream without a life to dream of, and without a mind to dream; into a dream made up only of a dream itself. Perception is a dream; thought, the source of all the existence and all the reality which I imagine to myself of my existence, of my power, of my destination—is the dream of that dream."—Sir William Hamilton, Reid's Works, p. 129, note.

In like manner, Mr. Hume resolved the phenomena of consciousness into impressions and ideas. And as according to Berkeley, sensitive impressions were no proof of external realities, so according to Hume, ideas do not prove the existence of mind—so that there is neither matter nor mind, for

anything that we can prove.

NIHILUM or NOTHING "is that of which everything can truly be denied, and nothing can be truly affirmed. So that the idea of nothing (if I may so speak) is absolutely the negation of all ideas. The idea, therefore, either of a finite or infinite nothing, is a contradiction in terms."—Clarke, Answer to Seventh Letter, note.

NOMINALISM (nomen, a name), is the doctrine that general

## NOMINALISM—

notions, such as the notion of a tree, have no realities corresponding to them, and have no existence but as names or words. The doctrine directly opposed to it is realism. the intermediate doctrine of conceptualism, nominalism is closely allied. It may be called the envelope of conceptualism, while conceptualism is the letter or substance of nominalism. "If nominalism sets out from eonceptualism, eonceptualism should terminate in nominalism," says Mons. Cousin, Introd. aux Ouvrages inédits d'Abailaird, 4to, Paris, 1836, p. 181.

Universalia ante rem, is the watchword of the Realists: Universalia in re, of the Conceptualists; Universalia post rem, of the Nominalists. The Nominalists were called Terminists about the time of the Reformation.—Ballantyne, Examin. of Hum. Mind, ch. 3, sec. 4.

"The Terminists, among whom I was, are so called because they speak of a thing in its own proper words, and do not apply them after a strange sort. They are also called Oecamists, from Ockham their founder. He was an able and a sensible man."—Luther, Table Talk, p. 540-42.

In asserting that universals existed, but only in the mind, Ockham agreed exactly with the modern Conceptualists.

NOMOLOGY (νόμος, λόγος).—If we analyze the mental phenomena with the view of discovering and considering, not contingent appearances, but the necessary and universal facts, i.e., the laws, by which our faculties are governed to the end that we may obtain a criterion by which to judge or to explain their procedures and manifestations—we have a science which we may call the Nomology of mind,—Nomological Psychology. —Sir Will. Hamilton's Lcct. vol. i. p. 122.

NON SEQUITUR (it does not follow; the inference is not necessary.)-It is sometimes used as a substantive; and an inconclusive inference is called a non seguitur.

NOOGONIE (νοῦς, mind; γόνος, birth, or generation), Genesis of the mind.—Kant.

NOOLOGY (νοῦς, mind; λόγος), is a term proposed by Mons. Paffe (Sur la Sensibilite, p. 30), to denote the science of intellectual facts, or the facts of intellect; and pathology (psychological), to denote the science of the phenomenes affectifs, or feelings, or sensibility.

The use of the term is noticed by Sir W. Hamilton (Reid's

NOOLOGY-

Works, note A, sec. 5, p. 770), as the title given to Treatises on the doctrine of First Principles, by Calovius, in 1651; Mejerus, in 1662; Wagnerus, in 1670; and Zeidlerus, in 1680—and he has said, "The correlatives noetic and dianoctic would afford the best philosophical designations, the former for an intuitive principle, or truth at first hand; the latter for a demonstrative proposition, or truth at second hand. Noology or noological, dianoialogy and dianoialogical, would be also technical terms of much convenience in various departments of philosophy."

Mons. Ampère proposed to designate the sciences which

treat of mind Les sciences Noologiques.

NORM (norma, from γνώριμος, a square or rule of builders), is used as synonymous with law. Anything not in accordance with the law is said to be abnormal.

"There is no uniformity, no *norma*, principle, or rule, perceivable in the distribution of the primeval natural agents through the universe."—Mill, Log., bk. iii. ch. 16, sec. 3.

knowledge, such as that which stands for a genus. We might say, a general conception, but for the consideration that "Conception" (Vorstellung) is better kept for the mental representation of an individual object. Notion and conception have commonly been used as synonymous.—Ed.] Bolingbroke says (essay i. On Human Knowledge, sec. 2), "I distinguish here between ideas and notions, for it seems to me, that, as we compound simple into complex ideas, so the composition we make of simple and complex ideas may be called, more properly, and with less confusion and ambiguity, notions."

Mr. Locke says (Essay on Hum. Understand., bk. ii. ch. 22), "The mind being once furnished with simple ideas, it can put them together in several compositions, and so make variety of complex ideas, without examining whether they exist so together in nature, and hence I think it is that these ideas are called notions, as they had their original and constant existence more in the thoughts of men than in the reality of things."

"The distinction of *ideas*, strictly so called, and *notions*, is one of the most common and important in the philosophy of

mind. Nor do we owe it, as has been asserted, to Berkeley. It was virtually taken by Descartes and the Cartesians, in their discrimination of ideas of imagination, and ideas of intelligence; it was in terms vindicated against Locke, by Serjeant, Stillingfleet, Norris, Z. Mayne, Bishop Brown, and others. Bonnet signalized it; and under the contrast of Anschauungen and Begriffe, it has long been an established and classical discrimination with the philosophers of Germany. Nay, Reid himself suggests it in the distinction he requires between imagination and conception,—a distinction which he unfortunately did not carry out, and which Mr. Stewart still more unhappily perverted. The terms notion and conception (or more correctly concept in this sense), should be reserved to express what we comprehend but cannot picture in imagination, such as a relation, a general term, &c. The word idea, as one prostituted to all meanings, it were better to discard. As for the representations of imagination or phantasy, I would employ the term image or phantasm, it being distinctly understood that these terms are applied to denote the representations not of our visible perceptions merely, as the term taken literally would indicate, but of our sensible perceptions in general."-Sir Will. Hamilton, Reid's Works, p. 291, note.

Notion is more general in its signification than idea. Idea is merely a conception, or at most a necessary and universal conception. Notion implies all this and more,—a judgment or series of judgments, and a certain degree of knowledge of the object. Thus we speak of having no notion or knowledge of a thing, and of having some notion or knowledge. It began to be used by Descartes in his Regulæ ad Directionem Ingenii, and soon came into current use among French philosophers. It enables us to steer clear of the ideas of Plato, of the species of the scholastics, and of the images of the empirical school. Hence Dr. Reid tells us that he used it in preference.—Diet. des Sciences Philosoph.

Des Maistre (Soirées de St. Petersbourg, p. 164), uses the French word notion as synonymous with pure idea, or innate idea, underived from sense.

Chalybæus, in a letter to Mr. Eddersheim (the translator of his work), says, "In English as in French, the word *idea*, *idée*, is applied, without distinction, to a representation, to a

notion, in short to every mental conception; while in German, in scientific language, a very careful distinction is made between sensuous 'vorstellung' (representation), abstract 'verstandesbegriff' (intellectual notion), and 'ideen' (ideas), of reason."

Notions or concepts are clear and distinct, or obscure and indistinct. "A concept is said to be clear when the degree of consciousness is such as enables us to distinguish it as a whole from others, and obscure when the degree of consciousness is insufficient to accomplish this. A concept is said to be distinct when the amount of consciousness is such as enables us to discriminate from each other the several characters or constituent parts of which the concept is the sum, and indistinct or confused when the amount of consciousness requisite for this is wanting."

### First Notions and Second Notions.

The distinction (which we owe to the Arabians) of first and second notions (notiones, conceptus, intentiones, intellecta prima et secunda) is a highly philosophical determination. . . . A first notion is the concept of a thing as it exists of itself, and independent of any operation of thought; as man, John, animal, &c. A second notion is the concept, not of an object as it is in reality, but of the mode under which it is thought by the mind; as individual, species, genus, &c. The former is the concept of a thing, real, immediate, direct: the latter the concept of a concept, formal, mediate, reflex."—Sir William Hamilton, Discussions, p. 137.

"Notions are of two kinds; they either have regard to things as they are, as horse, ship, tree, and are called first notions; or to things as they are understood, as notions of genus, species, attribute, subject, and in this respect are called second notions, which, however, are based upon the first, and cannot be conceived without them. Now logic is not so much employed upon first notions of things as upon second; that is, it is not occupied so much with things as they exist in nature, but with the way in which the mind conceives them.\*

<sup>\* &</sup>quot;See Buhle (Arist., i. p. 432), whose words I have followed. See also Craeanthorp (Log. Proem.), and Sir W. Hamilton (Edin. Rev., No. 115, p. 210). There is no authority whatever for Aldrich's view, which makes second intention mean, apparently, 'a term defined for scientific use;' though with the tenacious vitality of error it still lingers in some quarters, after wounds that should have been mortal."—V. INTENTION.

-Thomson, Outline of the Laws of Thought, 2d ed. pp. 39, 40.

Notions, Intuitive and Symbolical.—Leibnitz was the first to employ intuitive and intuition to denote our direct ostensive cognitions of an individual object either in sense or imagination, and in opposition to our indirect and symbolical cognitions acquired through the use of signs or language in the understanding. [This involves a misapplication of the word "notion." The term must always indicate representation or mediate knowledge; we may speak of cognitions, intuitive and symbolical, but not of intuitive notions. The passage occurs in the Meditationes de Cognitione, Veritate et Ideis, and "cognito" is the word at first employed by Leibnitz, though he does afterwards use notio.—Leibnitii, Opera Philo-

sophica, Erdmann, p. 79.—Ed.]

"When our notion of any object or objects consists of a clear insight into all its attributes, or at least the essential ones, he would call it intuitive. But where the notion is complex and its properties numerous, we do not commonly realize all that it conveys; the powers of thinking would be needlessly retarded by such a review. We think more compendiously by putting a symbol in the place of all the properties of our notion, and this naturally is the term by which we are accustomed to convey the notion to others. A name, then, employed in thought is called a symbolical cognition; and the names we employ in speech are not always symbols to another of what is explicitly understood by us, but quite as often are symbols both to speaker and hearer, the full and exact meaning of which neither of them stop to unfold, any more than they regularly reflect that every sovereign which passes through their hands is equivalent to 240 pence. Such words as the State, Happiness, Liberty, Creation, are too pregnant with meaning for us to suppose that we realize their full sense every time we read or pronounce them. If we attend to the working of our minds, we shall find that each word may be used, and in its proper place and sense, though perhaps few or none of its attributes are present to us at the moment. A very simple notion is always intuitive; we cannot make our notion of brown or red simpler than it is by any symbol. On the other hand, a highly complex notion,

like those named above, is seldom fully realized—seldom other than symbolical."—Thomson, Outline of the Laws of Thought, p. 47.

NOTIONES COMMUNES, also called prænotiones, anticipationes, communes notitiæ, προλήψεις, κοιναί ἔννοιαι—first truths, natural judgments, principles of common sense, are phrases employed to denote certain notions or cognitions which are native to the human mind, which are intuitively discerned, being clear and manifest in their own light, and needing no proof, but forming the ground of truth and evidence as to other truths.

NOUMENON (τὸ νοούμενον)—[The thing in itself, the real object to which the qualities recognized by us belong]—in the philosophy of Kant (an object as conceived by the understanding, or thought of by the reason, νοῦς), is opposed to phenomenon (an object such as we represent it to ourselves by the impression which it makes on our senses). Noumenon is an object in itself, not relatively to us. But we have, according to Kant, no such knowledge of things in themselves. For besides the impressions which things make on us, there is nothing in us but the forms of the sensibility and the categories of the understanding, according to which, and not according to the nature of things in themselves, it may be, are our conceptions of them.

Things sensible considered as in themselves and not as they appear to us, Kant calls negative noumena; and reserves the designation of positive noumena, to intelligibles properly so called, which are the objects of an intuition purely intellectual.—Willm, Hist. de la Philosoph. Allemande, tom. i. p. 200.

The two kinds of noumena taken together are opposed to phenomena, and form the intelligible world. This world we admit as possible, but unknown. Kantism thus tends towards sceptism.

"The word phenomenon has no meaning except as opposed to something intelligible—to a noumenon, as Kant says. Now, either we understand by the latter word a thing which cannot be the object of a sensuous intuition, without determining the mode in which it is perceived, and in this case we take it in a negative sense; or we understand it as the object of a real intuition, though not a sensuous one, an intellectual one,

### NOUMENON-

and then we take it in a positive sense. Which of these two is truth? It cannot unquestionably be affirmed à priori that the only possible manner of perception is sensuous intuition, and it implies no contradiction to suppose that an object may be known to us otherwise than by the senses. But, says Kant, this is only a possibility. To justify us in affirming that there really is any other mode of perception than sensuous intuition, any intellectual intuition, it must come within the range of our knowledge; and in fact we have no idea of any such faculty. We, therefore, cannot adopt the word noumenon in any positive sense; it expresses but an indeterminate object, not of an intuition, but of a conception—in other words a hypothesis of the understanding."—Henderson, Philosophy of Kant, p. 76.—V. Phenomenon.

NOVELTY (novus, new), any new or strange object, whether in nature or in art. "We are so constituted, that what is new to us commonly gives pleasure upon that account, if it be not in itself disagreeable. It rouses our attention, and occasions an agreeable exertion of our faculties. . . . . Curiosity is a capital principle in the human constitution, and its food must be what is in some respect new. . . . Into this part of the human constitution, I think, we may resolve the pleasure we have from novelty in objects."—Reid, Intell. Pow., essay viii. ch. 2.

NUMBER was held by Pythagoras to be the ultimate principle of being. His views were adopted to a certain extent by Plato, and attacked by Aristotle. In the Middle Ages, numbers and the proportions subsisting between them, were employed in the systems of the alchemists and cabalists. But in proportion as the true spirit of philosophy prevailed, numbers were banished from metaphysics, and the consideration of them was allotted to a separate science—arithmetic and algebra.

**OATH.**—An oath is a solemn appeal to God, as the author of all that is true and right, and a solemn promise to speak the truth and to do what is right. Oaths have been distinguished as—1. The assertory, or oath of evidence, and 2. The promissory,

# OATH-

or oath of office—the former referring to the past, and the latter to the future.

objects of sense or understanding. [What pertains to the knowing subject. Hence objective has come to mean that which has independent existence or authority, apart from our experience or thought. Thus moral law is said to have objective authority, that is, authority belonging to itself, and not drawn from anything in our nature.—Ed.]

With Aristotle incoesimeror signified the subject of a proposition, and also substance, The Latins translated it subjectum. In Greek object is increased in translated oppositum. In the Middle Ages subject meant substance, and has this sense in Descartes and Spinoza; sometimes also in Reid. Subjective is used by Will. Occam to denote that which exists independent of mind, objective that which the mind feigned. This shows what is meant by realitas objectiva in Descartes (Mcd. 3). In Descartes the formal reality is the real object, the objective reality is the idea, image, or subjective representation.

Kant and Fichte have inverted the meanings: subject is the mind which knows—object that which is known. Subjective the varying conditions of the knowing mind—objective that which is in the constant nature of the thing known.—Trendelenburg, Notes to Aristotle's Logic.

By objective reality Descartes meant the reality of the object in so far as represented by the idea or thought of it—by formal, or actual reality the reality of the object as conform to our idea of it. Thus the sun was objectively in our thought or idea of it—actually or formally in the heavens. He had also a third form of reality which he called cminent—that is, an existence superior at once to the idea and the object, and which contained in posse what both these had in csse.—Response à la Seconde Objection.

"In philosophical language, it were to be wished that the word subject should be reserved for the subject of inhesion—the materia in qua; and the term object exclusively applied to the subject of operation—the materia circa quam. If this be

### OBJECTIVE-

not done, the grand distinction of subjective and objective, in philosophy, is confounded. But if the employment of subject for object is to be deprecated, the employment of object for purpose or final cause (in the French and English languages) is to be absolutely condemned, as a recent and irrational confusion of notions which should be carefully distinguished."—Sir W. Hamilton, Reid's Works, p. 97, and App., note B.—V. Subject.

obligation (obligo, to bind).—[Personal subjection to the authority of law,—oughtness,—duty. "Bounden duty" is tautological.—Ed.] Obligation is legal or moral.

Obligation (Moral) has been distinguished as internal and external; according as the reason for acting arises in the mind

of the agent, or from the will of another.

Dr. Adams (Sermon on the Nature and Obligation of Virtue) has said, "Right implies duty in its idea. To perceive that an action is right, is to see a reason for doing it in the action itself, abstracted from all other considerations whatever. Now, this perception, this acknowledged rectitude in the action, is the very essence of obligation; that which commands the approbation of choice, and binds the conscience of every rational being." And Mr. Stewart (Act. and Mor. Pow., vol. ii. p. 294) has said, "The very notion of virtue implies the notion of obligation."

External obligation is a reason for acting which arises from the will of another, having authority to impose a law. It is also called authoritative obligation. Bishop Warburton (Div. Leg., bk. i. sec. 4) has contended that all obligation necessarily implies an obliger different from the party obliged; and moral obligation, being the obligation of a free agent, implies a law; and a law implies a lawgiver. The will of God, therefore [as expressing the absolute perfection of the Divine nature], is the true ground of all obligation, strictly and properly so called. The perception of the difference between right and wrong can be said to oblige only as an indication of the will of God.

There is no incompatibility between these two grounds of obligation.—See Whewell, Sermons on the Foundation of Morals, pp. 26-76; and Dr. Chalmers, Bridgewater Treatise, vol. i. p. 78.

### OBLIGATION-

By some philosophers, however, this stream of living waters has been parted. They have grounded obligation altogether on the will of God, and have overlooked or made light of the obligation which arises from our perception of rectitude. Language to this effect has been ascribed to Mr. Locke. - (Life by Lord King, vol. ii. p. 129). And both Warburton and Horsley, as well as Paley and his followers, have given too much, if not an exclusive, prominence to the rewards and punishments of a future life, as prompting to the practice of virtue. But, although God, in accommodation to the weakness of our nature and the perils of our condition, has condescended to quicken us, in the discharge of our duty, by appealing to our hopes and fears, both in regard to the life that now is and that which is to come, it does not follow that self-love, or a concern for our own happiness, should be the only, or even the chief spring, of our obedience. On the contrary, obedience to the divine will may spring from veneration and love to the divine character, arising from the most thorough conviction of the rectitude, wisdom, and goodness of the divine arrangements. 'And that this, more than a regard to the rewards of everlasting life, is the proper spring of virtuous conduct, is as plain as it is important to remark. See Sanderson, De Juramenti Obligatione, prælec. i. sec. 11; De Obligatione Conscientia, prælec. v.; Whewell, Morality, bk. i. ch. 4, pp. 84-89; King, Essay on Evil, Prelim. Dissert., sec 2.—V. RIGHT, SANCTION.

[A doctrine of moral obligation presents the great difficulty in the construction of a utilitarian theory of morals, in which a deterministic (necessitarian) theory of Will is an essential

part.

How the difficulty has been met may be seen from Mr. Mill, *Utilitarianism*, p 40, "Why am I bound to promote the general happiness? . . . . This difficulty will always present itself, until the influences which form moral character have taken the same hold of the principle which they have taken of some of the consequences." This shuns the difficulty,—shifting it from a philosophic to a practical one. The reference here is not to the difficulty in finding a rational explanation of the fact of obligation, but in acting up to admitted obligation. Prof. Bain makes obligation refer "to the class

# OBLIGATION-

of actions enforced by the sanction of punishment."—Emotions and Will, 3d ed. 264.—Ed.]

objects. But quite correctly it is made to include attention directed upon what is within, as well as upon what is without.

—Ed.] "The difference between experiment and observation consists merely in the comparative rapidity with which they accomplish their discoveries; or rather in the comparative command we possess over them, as instruments for the investigation of truth."—Stewart, Philos. Essays, Prelim. Dissert., ch. 2.

Mr. Stewart (*Elements*, vol. i. p. 106, note) has said, that according to Dr. Reid, "Attention to external things is observation, and attention to the subjects of our own consciousness is reflection. Yet Dr. Reid (*Intell. Pow.*, essay vi. ch. 1) has said, that "reflection, in its common and proper meaning, is equally applicable to objects of sense and to objects of consciousness—and has censured Locke for restricting it to that reflection which is employed about the operations of our minds. In like manner we may observe the operations of our own minds as well as external phenomena. Observation is better characterized by Sir John Herschell as passive experience.

"When we direct our attention to the workings of our own minds; that is to say, when we search for premises by means of consciousness instead of by means of observation, our powers of trying experiments are much greater. To a considerable degree we command our own faculties, and though these are few, perhaps none which we can use separately, we can at will exercise one more vigorously than the others. We can call, for instance, into peculiar activity, the judgment, the memory, or the imagination, and note the differences in our mental condition as the one faculty or the other is more And this is an experiment. Over our mental sensations we have less power. We cannot at will feel angry, or anxions, or frightened; but we can sometimes. though rarely, put ourselves really into situations by which certain emotions will be excited. And when, as is usually the case, this is impossible or objectionable, we can fancy ourselves in such situations."—Senior, Four Lectures on Pol. Econ., 1852, p. 31.

### OBSERVATION-

"Instead of contrasting observation and experiment, we should contrast spontaneous and experimental phenomena as alike subjects of observation. Facts furnished by artificial contrivances require to be observed just in the same way as those which are presented by nature without our interference; and yet philosophers are nearly unanimous in confining observation to the latter phenomena, and speaking of it as of something which ceases where experiment begins; while in simple truth, the business of experiment is to extend the sphere of observation, and not to take up a subject where observation lays it down."—S. Bailey, Theory of Reasoning, pp. 114, 115, 8vo, Lond. 1851.

According to M. Comte (Cours de Philosoph. Positive, tom. ii. p. 19) there are three modes of observation:—1. Observation, properly so called, or the direct examination of the phenomenon as it presents itself naturally. 2. Experiment, or the contemplation of the phenomenon, so modified more or less by artificial circumstances introduced intentionally by ourselves, with a view to its more complete investigation. 3. Comparison, or the successive consideration of a series of analogous cases, in which the phenomenon becomes more and more simple. The third head (as to which see tom. iii. p. 343) seems not so much a species of observation, as a mode of arranging observations, with a view to a proper investigation of the phenomena.—Sir G. C. Lewis, Meth. of Observ. in Polities, ch. 5, note.

According to Humboldt (Cosmos, vol. ii. p. 212) there are three stages of the investigation of nature—passive observation, active observation, and experiment.

The difference between active and passive observation is marked in Bacon (Nov. Org., i. aphor. 100). The former is when Experientia lege certa procedit, seriatim et continenter.

"This word experimental has the defect of not appearing to comprehend the knowledge which flows from observation, as well as that which is obtained by experiment. The German word empirical is applied to all the information which experience affords; but it is in our language degraded by another application. I therefore must use experimental in a larger sense than its etymology warrants."—Sir J. Mackintosh, On Bacon and Locke, Works, vol. i. p. 333.

of conditions favourable to its performance.—Ed.] Cicero (1. De Inventione) says:—Occasio est pars temporis, habens in se alicujus rei idoneam faciendi opportunitatem.—(De Offic., lib. i.) Tempus autem actionis opportunum, Græce, εὐκαιεία; Latine, appellatur occasio. The watchman falling asleep gives occasion to thieves to break into the house and steal.

"There is much difference between an occasion and a proper cause: these two are heedfully to be distinguished. Critical and exact historians, as Polybius and Tacitus, distinguish betwixt the  $\lambda \varrho_{\chi} \acute{\eta}$  and the  $\alpha i \tau i \alpha$ , the beginning, occasions, and the real causes, of a war."—Flavell, Discourse of the Occasions, Causes, Nature, Rise, Growth, and Remedies of Mental Errors.

"What is caused seems to follow naturally; what is occasioned follows incidentally, and what is created receives its existence arbitrarily. A wound causes pain, accidents occasioned delay, scandal creates mischief.

"Between the real cause and the occasion of any phenomenon there is a wide diversity. The one implies the producing power, the other only some condition upon which this power comes into exercise. If I cast a grain of corn into the earth, the occasion of its springing up and producing plant, ear, and grain, is the warmth and moisture of the soil in which it is buried; but this is by no means the cause. The cause lies in the mysterious vital power which the seed contains within itself; the other is but the condition upon which this cause produces the effect."—Morell, Specul. Phil., vol. i. p. 99.

OCCASIONAL CAUSES (Doctrine of) .- V. CAUSE.

OCCULT QUALITIES .- V. QUALITY.

ONE.—V. UNITY.

ONEIROMANCY.—V. DREAMING.

ONTOLOGY (öν and λόγος, the science of being).—"Ontology is a discourse of being in general, and the various or most universal modes or affections, as well as the several kinds or divisions of it. The word being here includes not only whatsoever actually is, but whatsoever can be."—Watts On Ontology, ch. 1. See also Smith, Wealth of Nations, bk v. ch. 1.

Ontology is the same as metaphysics. Neither the one name nor the other was used by Aristotle. He called the science now designated by them philosophia prima, and

ONTOLOGY-

defined it as ἐπιστήμη τοῦ ὅντος ἡ ὅντος—Scientia Entis Quatenus Entis, that is, the science of the essence of things; the science of the attributes and conditions of being in general, not of being in any given circumstances, not as physical or mathematical, but as being. The name ontology seems to have been first made current in philosophy by Wolf. He divided metaphysics into four parts—ontology, psychology, rational cosmology, and theology. It was chiefly occupied with abstract inquiries into possibility, necessity, and contigency, substance, accident, cause, &c., without reference to the laws of our intellect by which we are constrained to believe in them. Kant denied that we had any knowledge of substance or cause as really existing. But there is a science of principles and causes, of the principles of being and knowing. In this view of it, ontology corresponds with meta-

sphyics.

"Ontology may be treated of in two different methods, according as its exponent is a believer in τὸ ὄν, or in τὰ ὄντα, in one or in many fundamental principles of things. In the former, all objects whatever are regarded as phenomenal modifications of one and the same substance, or as self-determined effects of oue and the same cause. The necessary result of this method is to reduce all metaphysical philosophy to a Rational Theology, the one substance or Cause being identified with the Absolute or the Deity. According to the latter method, which professes to treat of different classes of beings independently, metaphysics will contain three co-ordinate branches of inquiry, Rational Cosmology, Rational Psychology, and Rational Theology. The first aims at a knowledge of the real essence, as distinguished from the phenomena of the material world; the second discusses the nature and origin, as distinguished from the faculties and affections, of the human soul and of other finite spirits; the third aspires to comprehend God himself, as cognizable à priori in his essential nature, apart from the in direct and relative indications furnished by his works, as in Natural Theology, or by his Word, as in Revealed Religion.

"These three objects of metaphysical inquiry, God, the World, the Mind, correspond to Kant's three ideas of the Pure Reason; and the object of his Critique is to show that

## ONTOLOGY-

in relation to all these, the attainment of a system of speculative philosophy is impossible."—Mansel, *Prolegom. Log.*, p. 277.

"The science of ontology comprehends investigations of every real existence, either beyond the sphere of the present world, or in any other way incapable of being the direct object of conscionsness, which can be deduced immediately from the possession of certain feelings or principles and faculties of the human soul."—Archer Butler, Lectures on Ancient Philosophy.

OPERATIONS (of the Mind).—[The active exercises of the mind, in contrast with its passive experiences.—Ed.] "By the operations of the mind,"\* says Dr. Reid (Intell. Pow., essay i. ch. 1), "we understand every mode of thinking of which we are conscious."

"It deserves our notice, that the various modes of thinking have always and in all language, as far as we know, been called by the name of operations of the mind, or by names of the same import. To body, we ascribe various properties, but not operations, properly so called: it is extended, divisible, movable, inert; it continues in any state in which it is put; every change of its state is the effect of some force expressed upon it, and is exactly proportional to the force impressed, and in the precise direction of that force. These are the general properties of matter, and these are not operations; on the contrary, they all imply its being a dead, inactive thing, which moves only as it is moved, and acts only by being acted upon. But the mind is, from its very nature, a living and active being. Everything we know of it implies life and active. energy; and the reason why all its modes of thinking are called its operations, is that in all, or in most of them, it is not merely passive as body is, but is really and properly

opinion (opinor, to think).—[Unverified Thought.—Ed.] "The essential idea of opinion seems to be that it is a matter about which doubt can reasonably exist, as to which two persons can without absurdity think differently. . . . . Any proposition, the contrary of which can be maintained with

<sup>\*</sup> Operation, act, and energy, are nearly convertible terms; and are opposed to faculty, as the actual to the potential.—Sir Will. Hamilton.

OPINION-

probability, is matter of opinion."—Sir G. C. Lewis, Essay on

Opinion, p. i. iv.

According to the last of these definitions, matter of opinion is opposed not to matter of fact, but to matter of certainty. Thus, the death of Charles I. is a fact—his authorship of Icon Basilike, an opinion. It is also used, however, to denote knowledge acquired by inference, as opposed to that acquired by perception. Thus, that the moon gives light, is matter of fact; that it is inhabited or uninhabited, is matter of opinion.

It has been proposed (*Edin. Rev.*, April 1850, p. 311), to discard from philosophical use these ambiguous expressions, and to divide knowledge, according to its sources, into matter of *perception* and matter of *inference*; and, as a cross division as to our conviction, into matter of *certainty* and matter of

doubt.

Holding for true, or the subjective validity of a judgment in relation to conviction (which is, at the same time, objectively valid), has the three following degrees:—opinion, belief, and knowledge. Opinion is a consciously insufficient judgment, subjectively as well as objectively. Belief is subjectively sufficient, but is recognized as being objectively insufficient. Knowledge is both subjectively and objectively sufficient. Subjective sufficiency is termed conviction (for myself); objective sufficiency is termed certainty (for all).—Meiklejohn, Transl. of Crit. of Pure Reason, p. 498.

**OPPORTUNITY.**—[Occasion favourable for action, both in respect of time, and of the conditions requisite.—Ed.]

OPPOSED, OPPOSITION (τὸ ἀντικείμενον, that which lies over against).—Aristotle has said, that "one thing may be opposed to another in four ways; by relation, by contrariety, or as privation is to possession, affirmation to negation. Thus, there is the opposition of relation between the double and the half; of contrariety between good and evil; blindness and seeing are opposed in the way of privation and possession; the propositions, he sits, and he does not sit, in the way of negation and affirmation."—V. Contrary, Privation, Term.

opposed to each other, when, having the same subject and predicate, they differ in quantity, or quality, or both. It is evident, that with any given subject and predicate, you may

## OPPOSITION-

state four distinct propositions, viz., A, E, I, and O; any two of which are said to be opposed; hence there are four different kinds of opposition, viz., 1st, the two universals (A and E), are called contraries to each other; 2d, the two particular (I and O), subcontraries; 3d, A and I, or E and O, subalterns; 4th, A and O, or E and I, contradictories."—Whately, Log., bk. ii. ch. 2, sec. 3.

The opposition of propositions may be thus exhibited :-

All A is B.
Some A is not B.

Some A is not B.

Contraries—may be both false, but cannot both be true.

Some A is B.
Some A is not B.

Contradictories—one must be true and the other false.

No A is B.
Some A is B.

All A is B.

All A is B.

Some A is B.

All A is B.

Some A is B.

All A is B.

Some A is B.

Some A is B.

Some A is B.

Respectively subalternate.

"There is no opposition between sub-contraries; for both may at once be maintained, as both at once must be true if the *some* be a negation of *all*. They cannot, however, both be false. The opposition in this case is only apparent.—Sir W. Hamilton, *Lect*. vol. iii. p. 261.

"Of two subalternate propositions the truth of the universal proves the truth of the particular, and the falsity of the particular proves the falsity of the universal, but not vice versa."
—Mill, Log., bk. ii. ch. 1.

OPTIMISM (optimum, the superlative of bonum, good), is the doctrine, that the universe, being the work of an infinitely

perfect Being, is the best that could be created.

This doctrine under various forms appeared in all the great philosophical schools of antiquity. During the Middle Ages it was advocated by St. Anselm and St. Thomas. In times comparatively modern, it was embraced by Descartes and Malebranche. But the doctrine has been developed in its highest form by Leibnitz.

According to him, God, being infinitely perfect, could neither will nor produce evil. And as a less good compared with a greater is evil, the creation of God must not only be good, but the best that could possibly be. Before creation, all

OPTIMISM-

beings and all possible conditions of things were present to the Divine Mind in idea, and composed an infinite number of worlds, from among which infinite wisdom chose the best. Creation was the giving existence to the most perfect state of things which had been ideally contemplated by the Divine Mind.

The optimism of Leibnitz has been misunderstood and misrepresented by Voltaire and others. But the doctrine which Leibnitz advocated is not that the present state of things is the best possible in reference to individuals, nor to classes of beings, nor even to this world as a whole, but in reference to all worlds, or to the universe as a whole—and not even to the universe in its present state, but in reference to that indefinite progress of which it may contain the germs.—Leibnitz, Essais de Theodicée: Malebranche, Entretiens Metaphysiques.

According to Mr. Stewart, Act. and Mor. Pow., bk. iii. ch. 3 sec. 1), under the title of optimists, are comprehended those who admit and those who deny the freedom of human actions,

and the accountableness of man as a moral agent.

order something of voluntary arrangement, and in series something of unconscious catenation. The order of a procession. The series of ages. A series of figures in uniform—soldiers in order of battle.—Taylor, Synonyms.

Order is the intelligent arrangement of means to accomplish an end, the harmonious relation established between the parts for the good of the whole. [Unam post aliam.] The primitive belief that there is order in nature, is the ground of all experience. In this belief we confidently anticipate that the same causes, operating in the same circumstances, will produce the same effects. This may be resolved into a higher belief in the wisdom of an infinitely perfect being, who orders all things.

Order has been regarded as the higher idea into which moral rectitude may be resolved. Every being has an end to answer, and every being attains its perfection in accomplishing that end. But while other beings tend blindly towards it, man knows the end of his being, and the place he holds in the scheme of the universe, and can freely and intelligently endeavour to realize that universal order of which he is

#### ORDER—

an element or constituent. In doing so he does what is

"There is one parent virtue, the universal virtue, the virtue which renders us just and perfect, the virtue which will one day render us happy. It is the only virtue. It is the love of the universal order as it eternally existed in the Divine Reason, where every created reason contemplates it. The love of order is the whole of virtue, and conformity to order constitutes the morality of actions."—Traité de Morale, Rott. 1634.

Such is the theory of Malebranche, and more recently of Jouffroy. In like manner, science, in all its discoveries, tends to the discovery of universal order. And art, in its highest attainments, is only realizing the truth of nature; so that the true, the beautiful, and the good, ultimately resolve themselves into the idea of order.

ORGAN.—An organ is a part of an animal or vegetable structure fitted to perform a particular action, which, or rather the performance of which action, is denominated its function.

"By the term organ," says Gall (vol. i. p. 228), "I mean the material condition which renders possible the manifestation The muscles and the bones are the material conof a faculty. dition of movement, but are not the faculty which causes movement!; the whole organization of the eye is the material condition of sight, but it is not the faculty of seeing. By the term 'organ of the soul,' I mean a material condition which renders possible the manifestation of a moral quality, or an intellectual faculty. I say that man in this life thinks and wills by means of the brain; but if one concludes that the brain is the thing that thinks and wills, it is as if one should say that the muscles are the faculty of moving; that the organ of sight and the faculty of secing arc the same thing. In each case it would be to confound the faculty with the organ, and the organ with the faculty."

"An organ of sense is an instrument composed of a peculiar arrangement of organized matter, by which it is adapted to rcceive from specific agents definite impressions. Between the agent that produces and the organ that receives the impressions, the adaptation is such, that the result of their mutual action ORGAN-

is, in the first place, the production of sensation; and, in the

second place, of pleasure."-Dr. Southwood Smith.

According to phrenological writers, particular parts of the brain are fitted to serve as instruments for particular faculties of the mind. This is organology. It is further maintained, that the figure and extent of these parts of the brain can be discerned externally. This is organoscopy or cranioscopy. Some who believe in the former, do not believe in the latter.

ORGANIZATION.—"An organized product of nature is that in which all the parts are mutually ends and means."—Kant.

organon or organical. But it was not till the fifteenth century that the name Organum came into common use (Barthélemy St. Hilaire, De la Logique d'Aristote, tom. i. p. 19). Bacon gave the name of Novum Organum to the second part of his Instauratio Magna. And the German philosopher, Lambert, in 1763, published a logical work under the title, Das Neue Organon.

Poste, in his translation of the *Posterior Analytics*, gives a sketch of the *Organum* of Aristotle, which he divides into four parts,—viz., *General Logic*, the *Logic of Deduction*, the *Logic of Induction*, and the *Logic of Opinion*; the third, indeed, not sufficiently articulated and disengaged from the fourth, and hence the necessity of a *Novum Organum*.

"The Organon of Aristotle, and the Organon of Bacon stand in relation, but the relation of contrariety; the one considers the laws under which the subject thinks, the other the laws under which the object is to be known. To compare them together, is therefore to compare together qualities of different species. Each proposes a different end; both, in different ways are useful; and both ought to be assiduously studied."—Sir Will. Hamilton, Reid's Works, p. 712, note.

ORIGIN (origo) may be taken in two senses, essentially different from each other. It may mean the cause of anything being

### ORIGIN-

produced, or it may imply simply the oecasion of its production.—Morell, Speeul. Phil., vol. i. p. 99.

ORIGINATE, ORIGINATION .- These words and their conjugates are coming to be used in the question concerning liberty and necessity. Does man originate his own actions? Is man a principle of origination? are forms of expression

equivalent to the question, Is man a free agent?

"To deny all originating power of the will, must be to place the primordial and necessary causes of all things in the Divine nature. . . . Whether as a matter of fact an originating power reside in man, may be matter of inquiry; but to maintain it to be an impossibility, is to deny the possibility of creation."—Thomson, Christ. Theism, "Will, they hold to be a free cause, a cause bk. i. ch. 6. which is not an effect; in other words, they attribute to it a power of absolute origination."—Sir W. Hamilton, Discussions, p. 595. See also Cairns, On Moral Freedom.

OSTENSIVE (ostendo, to show).—Ostensive proof—A proof is direct or ostensive when it evinces the truth of thesis through positive principles, that is, immediately; it is indirect or apagogical when it evinces the truth of a thesis through the falsehood of its opposite, that is, mediately. "An ostensive conception indicates how an object is constituted. It is opposed to the heuristic (heuretie) conception which indicates how, under its guidance, the quality and connection of objects of experience in general are to be sought. The conception of a man, a house, &c., is an ostensive one; the conception of the supreme intelligence (for theoretic reason) is an heuristic conception."—Haywood, Explanation of Terms in the Crit. of Pure Reason.

OUGHTNESS .- V. DUTY.

OUTNESS.—[Externality.] "The word outness, which has been of late revived by some of Kant's admirers in this country, was long ago used by Berkeley in his Principles of Human Knowledge (sec. 43); and at a still earlier period of his life. in his Essay towards a New Theory of Vision (sec. 46). I mention this as I have more than once heard the term spoken of as a fortunate innovation."-Stewart, Philosoph. Essays, part i. essay 2.-V. Externality.

PACT.—V. CONTRACT, PROMISE.

PALÆTIOLOGY.—While Palæontology describes the beings which have lived in former ages without investigating their causes, and Actiology treats of causes without distinguishing historical from mechanical causation, Palætiology is a combination of the two sciences; exploring, by means of the second, the phenomena presented by the first. All these sciences are connected by this bond,—that they all endeavour to ascend to a past state, by considering what is the present state of things, and what are the causes of the change."—Whewell, Hist. of Scient. Ideas, vol. ii. p. 258.

PALINGENESIA.— V. METEMPSYCHOSIS.

**PANTHEISM** ( $\pi\tilde{\alpha}_5$ , all;  $\theta_{505}$ , God).—"It supposes God and nature, or God and the whole universe, to be one and the same substance—one universal being; insomuch that men's souls are only modifications of the Divine substance."—Waterland, *Works*, vol. viii. p. 81.

Pantheistæ qui contendunt unicam esse substantiam, cujus partes sunt omnia entia quæ existunt.—Lacondre, Inst.

Philosoph., tom. ii. p. 120.

Pantheism, when explained to mean the absorption of God in nature, is atheism; and the doctrine of Spinoza has been so regarded by many [but quite erroneously.—Ed.] When explained to mean the absorption of nature in God—of the finite in the infinite—it amounts to an exaggeration of theism. But Pantheism, strictly speaking, is the doctrine of the necessary and eternal co-existence of the finite and the infinite—of the absolute consubstantiality of God and nature—considered as two different but inseparable aspects of universal existence; and the confutation of it is to be found in the consciousness which every one has of his personality and responsibility, which Pantheism destroys.

Pantheist.—One of the first uses of this word is by Toland in the Pantheisticon, 1720, where it has its ancient polytheistic sense. It is a little later that it passes from the idea of the worship of the whole gods to the worship of the entire universe looked at as God. It is now used to denote the disbelief of a personal first cause; but a distinction ought to be made between the Pantheism like that of Averroes, which regards the world as an emanation and sustained by an anima mundi, and that which, like the view of Spinoza, regards the

# PANTHEISM—

sum total of all things to the Deity.—See Farrar, Bampton Lect. p. 149.

Pantheism has different forms,-

Material Pantheism, according to which the mere matter of the universe, with its forces, including life and thought, as the result of organism, constitute the One All, which may be called God.

Organic or Vital Pantheism, according to which all nature has life, and an impersonal power is substituted for a personal God.

One-Substance Pantheism, according to which there is but one substance. This substance is infinite, a part of it is substance finite, and man is such a part of the Divine substance. This is the Pantheism of Spinoza.

Ideal Pantheism, according to which God and the universe are creation of the mind of man.—Schelling and Hegel. "Pantheism is the poetry of Atheism."—F. Newman, Theism, p. 26.

PARABLE (παραβολή, from παραβάλλω, to put or set beside), has been defined to be a "fictitious but probable narrative taken from the affairs of ordinary life to illustrate some higher and less known truth." "It differs from the Fable, moving, as it does, in a spiritual world, and never transgressing the actual order of things natural; from the Myth, there being in the latter an unconscious blending of the deeper meaning with the outward symbol, the two remaining separate, and separable in the Parable; from the Proverb, inasmuch as it is longer carried out, and not merely accidentally and occasionally, but necessarily figurative; from the Allegory, comparing, as it does, one thing with another, at the same time preserving them apart as an inner and an outer, not transferring, as does the Allegory, the properties, and qualities and relations of one to the other."—Trench, On the Parables.

PARADOX (παςά δόξα, beyond, or contrary to appearance), is a proposition which seems not to be true, but which turns out to be true. Cicero wrote "Paradoxa," and the Hon. Robert Boyle published in 1666, Hydrostatical Paradoxes, made out by new experiments.

PARALOGISM (παραλογισμός, from παραλογίζομαι, to reason wrongly), is a formal fallacy or pseudo-syllogism, in which

# PARALOGISM-

the conclusion does not follow from the premises. We may be deceived ourselves by a paralogism; when we endeavour to deceive others by it, it is a sophism.

Paralogism of Pure Reason.—"The logical paralogism consists in the erroneonsness of a syllogism, according to form, whatever besides its content may be. But a transcendental paralogism has a transcendental foundation of concluding falsely, according to the form. In such a way, a like false conclusion will have its foundation in the nature of human reason, and will carry along with itself an inevitable, although not an insoluble illusion."—Kant, Crit. of Pure Reason, p. 299.

PARCIMONY (Law of) (parcimonia, sparingness).—"That substances are not to be multiplied without necessity;" in other words, "that a plurality of principles are not to be assumed, when the phænomena can possibly be explained by one." This regulative principle may be called the law or maxim of parcimony.—Sir Will. Hamilton, Reid's Works, p. 751, note A. Entia non sunt multiplicanda præter necessitatem. Frustra

fit per plura quod fieri potest per pauciora.

# PARONYMOUS.—V. CONJUGATE.

PART (μέρος, pars, part, or portion).—"Part, in one sense, is applied to anything divisible in quantity. For that which you take from a quantity, in so far as it is quantity, is a part of that quantity. Thus two is a part of three. In another sense, you only give the name of part to what is an exact measure of quantity; so that, in one point of view, two will be a part of three, in another not. That into which von can divide a genus, animal, for example, otherwise than by quantity, is still a part of the genus. In this sense species are parts of the genus. Part is also applied to that into which an object can be divided, whether matter or form. Iron is part of a globe, or cube of iron; it is the matter which receives the form. An angle is also a part. Lastly, the elements of the definition of every particular being are parts of the whole; so that, in this point of view, the genus may be considered as part of the species; in another, on the contrary, the species is part of the genus."—Aristotle, Metaphys., lib. iv. cap. 25.

"Of things which exist by parts, there are three kinds. The first is of things, the parts of which are not co-existent, but

### PART—

successive; such as time or motion, no two parts of which can exist together.

"The next kind of things consisting of parts, is such where parts are co-existent and contiguous. Things of this kind are said to be extended; for extension is nothing else but co-existence

and junction of parts.

"The third kind of things existing by parts is, when the parts are co-existent, yet not contiguous or joined, but separate and disjoined. Of this kind is number, the parts of which are separated by nature, and only united by the operation of the mind."—Monboddo, Ancient Metaphys., bk. ii. ch. 13.

PARTHENOGENESIS, or the successive production of procreating individuals from a single ovum, is the title of a work by

Richard Owen, F.R.S., Lond. 1849.

PASSION (passio, πάσχω, to suffer), [highly excited and agitating feeling, violently urging towards a single course of action.

Intense emotion. Sometimes, suffering.—Ed.]

PASSIONS (The).—This phrase is sometimes employed in a wide sense to denote all the states or manifestations of the sensibility—every form and degree of feeling. In a more restricted psychological sense, it is confined to those states of the sensibility which are turbulent, and weaken our power of self-command. This is also the popular use of the phrase, in which passion is opposed to reason.

Plato arranged the passions in two classes,—the concupiscible and irascible,  $\epsilon \pi \iota \theta \nu \mu \iota \alpha$  and  $\theta \tilde{\nu} \mu \iota \sigma_5$ , the former springing from the body and perishing with it, the latter connected with the rational and immortal part of our nature, and stimulating to the pursuit of good and the avoiding of excess and evil.

Aristotle included all our active principles under one general designation of Orectic, and distinguished them into the appetite irascible, the appetite concupiscible, which had their origin in the body, and the appetite rational (βούλησις), which is the will, under the guidance of reason.

Descartes and Malebranche have each given a theory and classification of the passions; also, Dr. Isaac Watts, Dr.

Cogan, and Dr. Hutcheson.

PASSIVE.—"A passive state is the state of a thing while it is operated upon by some cause. Everything and every being but God, is liable to be in this state. He is pure energy—

# PASSIONS-

always active, but never acted upon; while everything else is liable to suffer change."—See Harris, Dialogue concerning

Happiness, p. 86, note.

PERCEPTION (capio, to take; per, by means of), apprehension by means of the organs of sense. Sir W. Hamilton employs perception to denote the faculty, and percept the individual act of perceiving. "A percept may be defined—the cognitive element in an act of sensation."—Lowndes' Primary Beliefs, p. 48.

Descartes (Princip. Philosoph., pars 1, sec. 32) says, "Omnes modi cogitandi, quos in nobis experimur, ad duos generales referri possunt: quorum unus est perceptio, sive operatio intellectus; alius vero, volitio, sive operatio voluntatis. Nam sentire, imaginari, et pure intelligere, sunt tantum diversi modi percipiendi; ut et cupere, aversari, affirmare, negare, dubitare,

sunt diversi modi volendi."

Locke (Essay on Hum. Understand., book ii. chap. 6) says, "The two principal actions of the mind are these two; perception or thinking, and volition or willing. The power of thinking is called the understanding, and the power of volition the will; and these two powers or abilities of the

mind are called faculties."

Dr. Reid thought that "perception is most properly applied to the evidence which we have of external objects by our senses." He says (Intell. Pow. essay i. chap. i), "The perception of external objects by our senses, is an operation of the mind of a peculiar nature, and ought to have a name appropriated to it. It has so in all languages. And, in English, I know no word more proper to express this act of the mind than perception. Seeing, hearing, smelling, tasting, and touching or feeling, are words that express the operations proper to each sense; perceiving expresses that which is common to them all."

The restriction thus imposed upon the word by Reid, is to be found in the philosophy of Kant; and, as convenient,

has been generally acquiesced in.

In note D\* to Reid's Works, p. 876, Sir Will. Hamilton notices the following meanings of perception, as applied to different faculties, acts, and objects:—

1. Perceptio, in its primary philosophical signification, as

# PERCEPTION-

in the mouths of Cicero and Quintilian, is vaguely equivalent to comprehension, notion, cognition in general.

- 2. An apprehension, a becoming aware of, consciousness. *Perception*, the Cartesians really identified with *idea*, and allowed them only a logical distinction; the same representative act being called *idea*, inasmuch as we regard it as a representation; and *perception*, inasmuch as we regard it as a consciousness of such representation.
- 3. Perception is limited to the apprehension of sense alone. This limitation was first formally imposed by Reid, and thereafter by Kant.
- 4. A still more restricted meaning, through the authority of Reid, is *perception* (proper), in contrast to *sensation* (proper).

He defines sensitive perception, or perception simply as that act of consciousness whereby we apprehend in our body,

- a. Certain special affections, whereof, as an animated organism, it is contingently susceptible; and
- b. Those general relations of extension, under which, as a material organism, it necessarily exists.

Of these perceptions, the former, which is thus conversant about a subject-object, is sensation proper; the latter, which is thus conversant about an object-object, is perception proper. Descartes, Malebranche, Arnauld, Locke, and philosophers in general before Reid, employed the term perception as coextensive with consciousness. By Leibnitz, Wolf, and their followers, it was used in a peculiar sense, as equivalent to representation or idea-proper, and as contradistinguished from apperception or eonseiousness. Reid's limitation of the term, though the ground on which it is defended are not of the strongest, is imminent, and has been very generally admitted.—Hamilton's Discussions, p. 75.

# PERCEPTIONS (Obscure), or latent modifications of mind.

Every moment the light reflected from innumerable objects, smells and sounds of every kind, and contact of different bodies are affecting us. But we pay no heed to them. These are what Leibnitz (Avant Propos de ses Nouv. Essais) calls obscure perceptions—and what Thurot (De l'Entendement, &c., tom. i. p. 11) proposes to call impressions. But this word is already appropriated to the changes produced

## PERCEPTIONS-

by communication between an external object and a bodily

organ.

The sum of these obscure perceptions and latent feelings, which never come clearly into the field of consciousness, is what makes us at any time well or ill at ease. And as the amount in general is agreeable it forms the charm which attaches us to life—even when our more defined perceptions and feelings are painful.

The following account of Leibnitz's philosophy as to (obscure) perceptions is translated from Tiberghien, Essai des

Connaiss. Hum., p. 566:-

"Confused or insensible perceptions are without consciousness or memory. It is difficult enough to seize them in themselves, but they must be, because the mind always thinks. A substance cannot be without action, a body without movement, a mind without thought. There are a thousand marks which make us judge that there is, every moment, in us an infinity of perceptions; but the habit in which we are of perceiving them, by depriving them of the attraction of novelty, turns away our attention and prevents them from fixing themselves in our memory. How could we form a clear perception without the insensible perceptions which constitute it? To hear the noise of the sea, for example, it is necessary that we hear the parts which compose the whole, that is, the noise of each wave, though each of these little noises does not make itself known but in the confused assemblage of all the others together with it. A hundred thousand nothings cannot make anything. And sleep, on the other hand, is never so sound that we have not some feeble and confused feeling; one would not be wakened by the greatest noise in the world, if one had not some perception of its commencement, which is small.

"It is important to remark how Leibnitz attaches the greatest questions of philosophy to these insensible perceptions, in so far as they imply the law of continuity. It is by means of these we can say that the present 'is full of the past and big with the future,' and that in the least of substances may be read the whole consequences of the things of the universe. They often determine us without our knowing it, and they deceive the vulgar by the appearance of an indifference of

## PERCEPTIONS-

equilibrium. They supply the action of substances upon one another, and explain the pre-established harmony of soul and body. It is in virtue of these insensible variations that no two things can ever be perfectly alike (the principle of indiscernibles), and that their difference is always more than numerical, which destroys the doctrine of the tablets of the mind being empty, of a soul without thought, a substance without action, a vacuum in space, and the atoms of matter. There is another consequence—that souls, being simple substances, are always united to a body, and that there is no soul entirely separated This dogma resolves all the difficulties as to the immortality of souls, the difference of their states being never anything but that of more or less perfect, which renders their state past or future as explicable as their present. It also supplies the means of recovering memory, by the periodic developments which may one day arrive."

"Obscure ideas, or more properly, sensations with dormant consciousness, are numerous. It is through them, so far as they proceed from the nervous system of vegetative life, and thus accompany all its functions, digestion, secretion, &c., that the soul, according to Stahl, secretly governs the body. 'Animus est instar oceani,' says Leibnitz, 'in quo infinita multitudo perceptionum obscurissimarum adest, et distinctæ idea instar insularum sunt, qua ex oceano cmergunt.' It is they which are active throughout the whole progress of the formation of thought; for this goes on, though we are unconscious of it, and gives us only the perfect results, viz., ideas and notions. It is they which in the habitual voluntary motions, for instance, in playing on the piano, dancing, &c., set the proper muscles in motion through the appropriate motor nerves, though the mind does not direct to them the attention of consciousness. It is they which in sleep and in disorders of mind act a most important part. It is their totality which forms what plays so prominent a part in life under the name of disposition or temper."-Fenchtersleben, Med. Psychology, 1847, p. 169.

Lord Jeffrey had a fancy, or said he had it, that though he went to bed with his head stuffed and confused with the names and dates and other details, of various causes, they were all in order in the morning; which he accounted for by

## PERCEPTIONS—

saying, that during sleep "they all crystallized round their proper centres."—Cockburn, Life of Jeffrey, vol. i. p. 243, note.—V. LATENT.

PERFECT, PERFECTION (perficio; perfectum, made out, complete).—To be perfect is to want nothing. "By perfection is meant the full and harmonious development of all our faculties, corporeal and mental, intellectual and moral; by happiness, the complement of all the pleasures of which we are susceptible. Human perfection and human happiness coincide, and thus constitute, in reality, but a single end."—Sir W. Hamilton, Lect., vol. i. p. 20. Perfection is relative or absolute. A being possessed of all the qualities belonging to its species in the highest degree may be called perfect in a relative sense. But absolute perfection can only be ascribed to the Supreme Being. We have the idea of a Being infinitely perfect—and from this Descartes reasoned that such a being really exists.

The perfections of God are those qualities which he has communicated to his rational creatures, and which are in Him in an infinitely perfect degree. They have been distinguished as natural and moral—the former belonging to Deity as the great first cause—such as independent and necessary existence—the latter as manifested in the creation and government of the universe—such as goodness, justice, &c. But they are all natural in the sense of being essential. It has been proposed to call the former attributes, and the latter perfections. But this distinctive use of the terms has not prevailed; indeed it is not well founded. In God there are nothing but attributes—because in Him everything is absolute and involved in the substance and unity of a perfect being.

PERFECTIBILITY (The Doctrine of) is, that men, as individuals, and as communities [are capable of] progress to a state of perfection, even in this life. That men as a race are capable of progress and improvement is a fact attested by experience and history. But that this improvement may be carried into their whole nature—and to an indefinite extent—that all the evils which affect the body or the mind may be removed—cannot be maintained. Bacon had faith in the intellectual progress of men when he entitled his work "Of the Advancement of Learning." Pascal has articu-

# PERFECTIBILITY—

lately expressed this faith in a preface to his "Treatise of a Vacuum." "Not only individual men advance from day to day in knowledge, but men as a race make continual progress in proportion as the world grows older, because the same thing happens in a succession of men as in the different periods of the life of an individual; so that the succession of men during a course of so many ages, ought to be considered as the same man always living and always learning. From this may be seen the injustice of the reverence paid to antiquity in philosophy; for as old age is the period of life most distant from infancy, who does not see that the old age of the universal man is not to be sought for in the period nearest his birth, but in that most remote from it." Malebranche (Search after Truth, bk. ii. part ii. ch. 4) expressed a similar opinion; and the saying of a great modern reformer is well known, "If you talk of the wisdom of the ancients, we are the ancients." It cannot be denied that in arts and sciences. and the accommodations of social life, and the extension of social freedom, the administration of justice, the abolition of slavery, and many other respects, men have improved, and are improving, and may long continue to improve. But human nature has limits beyond which it cannot be carried. Its life here cannot be indefinitely prolonged, its liability to pain cannot be removed, its reason cannot be made superior to error, and all the arrangements for its happiness are liable to go wrong.

Leibnitz, in accordance with his doctrine that the universe is composed of monads essentially active, thought it possible that the human race might reach a perfection of which we cannot well conceive. Charles Bonnet advocated the doctrine of a palingenesia, or transformation of all things into a better state. According to him, perfectibility is the characteristic which essentially distinguishes man from the brutes. In the last century the great advocates of social progress are Fontenelle, Turgot, and Condorcet, in France; Lessing, Kant, and Schiller, in Germany; Price and Priestley, in England. Owen's views are also well known.—Mercier, De la Perfectibilité Humaine, 8vo, Paris, 1842.

PERIPATETIC (περιπατητικός, ambulator, from περιπατέω, to walk about), is applied to Aristotle and his followers, who

#### PERIPATETIC-

seem to have carried on their philosophical discussions while walking about in the halls and promenades of the Lyceum.

PERSON, PERSONALITY.—[Contrasted with thing, and animal, -a being capable of exercising understanding and will -a self-determining intelligence.—Ed.] Persona, in Latin, meant the mask worn by an actor on the stage, within which the sounds of the voice were concentrated, and through which (personuit) he made himself heard by the immense audience. From being applied to the mask it came next to be applied to the actor, then to the character acted, then to any assumed character, and lastly, to any one having any character or station. Martinius gives as its compositionper se una, an individual. "Person," says Locke (Essay on Hum. Understand., bk. ii. chap. 27), "stands for a thinking intelligent being, that has reason and reflection, and can consider itself as itself, the same thinking thing in different times and places." "We attribute personality," says Mons. Ahrens (Cours de Psychologie, tom. ii. p. 272), "to every being which exists not solely for others, but which is in the relation of unity with itself in existing, or for itself. Thus we refuse personality to a mineral or a stone, because these things exist for others, but not for themselves. An animal, on the contrary, which exists for itself, and stands in relation to itself, possesses a degree of personality. But man exists for himself in all his essence, in a manner more intimate and more extensive; that which he is, he is for himself, he has consciousness of it. But God alone exists for himself in a manner infinite and absolute. God is entirely in relation to himself; for there are no beings out of him to whom he could have relation. His whole essence is for himself, and this relation is altogether internal: and it is this intimate and entire relation of God to himself in all his essence, which constitutes the divine personality."

"The seat of intellect," says Paley, "is a person."

A being intelligent and free, every spiritual and moral agent, every cause which is in possession of responsibility and consciousness, is a *person*. In this sense, God considered as a creating cause, distinct from the universe, is a *person*.

According to Boethius, Persona est rationalis natura individua substantia.

#### PERSON-

"Whatever derives its powers of motion from without, from some other being, is a thing. Whatever possesses a spontaneous action within itself, is a person, or, as Aristotle (Nicom. Eth., lib. iii.) defines it, an dexh  $\pi edze\omega s$ ."—Sewell, Christ. Mor., p. 152.

"Personality is individuality existing in itself, but with a nature as its ground."—Coleridge, Notes on Eng. Div., vol. i.

p. 43.

"If the substance be unintelligent in which the quality exists, we call it a thing or substance, but if it be intelligent, we eall it a person, meaning by the word person to distinguish a thing or substance that is intelligent, from a thing or substance that is not intelligent. By the word person, we therefore mean a thing or substance that is intelligent, or a conscious being; including in the word the idea both of the substance and its properties together."—Henry Taylor, Apology of Ben Mordecai, letter i. p. 85.

Personality, in jurisprudence, denotes the capacity of rights and obligations which belong to an intelligent will.—Jouffroy,

Droit. Nat., p. 19.

PETITIO PRINCIPII (or petitio quasti, begging the question).—
V. Fallacy.

PHENOMENOLOGY.—[A science of things as they are recognized by our senses, and of facts as they occur in our experience.—

Ed.]

PHENOMENON (Φαινόμενον, from Φαίνομαι, to appear), is that which has appeared. It is generally applied to some sensible appearance, some occurrence in the course of nature. But in mental philosophy it is applied also to the various and changing states of mind. [So, we have "phenomena of nature," and "phenomena of mind."]

"Among the various phenomena which the human mind presents to our view, there is none more ealculated to excite our euriosity and our wonder, than the communication which is carried on between the sentient, thinking, and active principle within us, and the material objects with which we are surrounded."—Stewart, Elements, ch. 1, sec. 1.

In the philosophy of Kant, phenomenon means an object such as we represent it to ourselves or eoneeive of it, in opposition to nouncenon, or a thing as it is in itself.

#### PHENOMENON-

"According to Kant, the facts of consciousness, in their subjective character, are produced partly from the nature of the things of which it is conscious; and hence, in their objective character, they are phenomena, or objects as they appear in relation to us, not things in themselves, noumena, or realities in their absolute nature, as they may be out of relation to the mind. The subjective elements which the mind itself contributes to the consciousness of every object are to be found, as regards intuition, in the forms of space and time; and as regards thought, in the categories, unity, plurality, and the rest.\* To perceive a thing in itself would be to perceive it neither in space nor in time; for these are furnished by the constitution of our perceptive faculties, and constitute an element of the phenomenal object of intuition only. think of a thing in itself would be to think of it neither as one nor as many, nor under any other category; for these, again, depend upon the constitution of our understanding, and constitute an element of the phenomenal object of thought. The phenomenal is the product of the inherent laws of our own mental constitution, and, as such, is the sum and limit of all the knowledge to which we can attain."—Mansel, Lect. on Phil. of Kant, pp. 21, 22.

The definition of phenomenon is, "that which can be known only along with something else" [that is, with Self.]—Ferrier, Inst. of Metaphys., p. 319.—V. NOUMENON, APPEARANCE.

PHILANTHROPY (φίλανθοωπία, from φιλανθοωπεύω, to be a friend to mankind).—"That God-like excellency, a philanthropy and love to all mankind."—Bp. Taylor, vol. iii. serm. i.

This state or affection of mind does not differ essentially from charity or brotherly love. Both spring from benevolence or a desire for the well-being of others. When our benevolence is purified and directed by the doctrines and precepts of religion, it becomes charity or brotherly love.

- \* I. Categories of Quantity.
  Unity.
  Plurality.
  Totality.
- III. Categories of Relation, Inherence and Subsistence. Casuality and Dependence, Community, or Reciprocal Action.
- II. Categories of Quality. Reality. Negation. Limitation.
- IV. Categories of Modality. Possibility, or Impossibility. Existence, or Non-Existence. Necessity or Contingence.

### PHILANTHROPY-

When sustained by large and sound views of human nature and the human condition, it seeks to mitigate social evils and increase and multiply social comforts, it takes the name of *philanthropy*. But there is no incompatibility between the two.

Philanthropy, or a vague desire and speculation as to improving the condition of the whole human race, is sometimes opposed to nationality or patriotism. But true charity or benevolence, while it begins with loving and benefiting those nearest to us by various relations, will expand according to the means and opportunities afforded of doing good.

"Friends, parents, neighbours, first it will embrace, Our country next, and next all human race. Wide and more wide, the o'erflowing of the mind, Takes every creature in of every kind.

Earth smiles around, in boundless beauty dressed, And heaven reflects its image in her breast."—Pope.

PHILOSOPHY (φιλοσοφία, φιλία, σοφία, the love of wisdom).— [Philosophy is a rational explanation of things existing and of things occurring. Technically, Philosophy is the ultimate rational explanation of things, obtained by discovery of the reason of their existence, or by showing why they exist. Science is the rational explanation of external phenomena, by discovery of invariable sequence in their occurrence, and postulating accordingly a "law of nature," its object being to show how the phenomena exist.—Ed.] The origin of the word is traced back to Pythagoras, who did not call himself σοφός, like the wise men of Greece, but merely declared himself to be a lover of wisdom, place oopias. Surrounded with ever changing phenomena, man seeks to know their causes, tries to bring their multiplicity to something like unity, and to reduce their variety to law and rule. When so employed he is prosecuting philosophy. It was defined by Cicero (De Officiis, lib. ii. cap. 2), Rerum divinarum et humanarum,\* causarumque quibus hæ res continentur, scientia. But what man can attain or aspire to such knowledge, or even to the knowledge of one of the several departments into which philosophy may be divided? "In philosophy," says

<sup>\*</sup> According to Lord Monboddo (Ancient Metaphys., bk. i. eh. 5), the Romans had only the word sapientia for philosophy, till about the time of Cicero, when they adopted the Creek word philosophia.

### PHILOSOPHY-

Lord Bacon (Of the Advancement of Learning, bk. ii.), "the contemplations of man do either penetrate unto God, or are circumferred to nature, or are reflected or reverted upon himself. Out of which several inquiries there do arise three knowledges, Divine philosophy, natural philosophy, and human philosophy, or humanity." Philosophy began in wonder, Διὰ γὰρ το θαυμάζειν δι ἄνθρωποι, καὶ νῦν και τὸ πρώτον ἤρξαντο Φιλοσοφείν.—Arist., Metaphys., i. 12. Now the object-matter of philosophy may be distinguished as God, or nature, or man. But, underlying all our inquiries into any of these departments, there is a first philosophy, which seeks to ascertain the grounds or principles of knowledge, and the causes of all things. Hence philosophy has been defined to be the science of causes and principles. It is the investigation of those principles on which all knowledge and all being ultimately rest. It is the exercise of reason to solve the most elevated problems which the human mind can conceive. How do we know? and what do we know? It examines the grounds of human certitude, and verifies the trustworthiness of human knowledge. It inquires into the causes of all beings, and ascertains the nature of all existences by reducing them to unity. Each department of knowledge may be said to have its philosophy, it is because it rests upon that knowledge of principles and causes which is common to them all. Man first examines phenomena, but he is not satisfied till he has reduced them to their causes, and when he has done so he asks to determine the value of the knowledge to which he has attained. This is philosophy properly so called,—the mother and governing science—the science of sciences. Aristotle's definition of philosophy is-"A knowledge of things by their causes."—Metaph., v. i.

"'Philosophy is the science of first principles,' that, namely, which investigates the primary grounds, and determines the fundamental certainty, of human knowledge generally."—Morell, Philosoph. Tendencies of the Age, 8vo, Lond. 1848, p. 13.

Peemans, Introd. ad Philosoph., 12mo, Lovan. 1840, sec. 107, proposes the following definition:—"Philosophia est scientia rerum per causas primas, recto rationis usu comparata."

By this definition philosophy is distinguished from othe

### PHILOSOPHY-

kinds of knowledge. 1. From simple intelligence, which is intuitive, while philosophical knowledge is discursive. 2. From natural sciences, which do not always reach to first causes. 3. From arts, which do not proceed by causes or principles, but by rule. 4. From faith or belief, which rests not [on rationalized interpretation, but] on evidence or authority. 5. From opinion, which is not certain knowledge. And from the common love of knowledge and truth, which does not prosecute and acquire it scientifically.

"Philosophy is the attainment of truth by the way of

reason."—Ferrier, Inst. of Metaphys., p 2.

PHILOSOMATIST (Φιλος σωμα, a lover of the body).—"When you see a man afraid to die, this is evidence that he is not a philosopher, but a lover of bodily enjoyments."—Plato, Meno.

PHRENOLOGY (Φεήν, mind; λόγος, discourse).—This word ought to mean Psychology, or mental philosophy, but has been appropriated by Craniologists, on account of the light which their observations of the convolutions of the brain and corresponding elevations of the skull are supposed to throw on the nature and province of our different faculties. According to Dr. Gall, the founder of Craniology, "its end is to determine the functions of the brain in general, and of its different parts in particular, and to prove that you may recognize different dispositions and inclinations by the protuberances and depressions to be found on the cranium. The cranium being exactly moulded upon the mass of the brain, every portion of its surface will present dimensions and developments according to the corresponding portion of the brain. But individuals in whom such or such a portion of the brain is largely developed, have been observed by phrenologists to be remarkable for such or such a faculty, talent, or virtue, or vice; and the conclusion is, that the portion of the brain responding to that development of the cranium is the seat of that faculty, or, virtue, or vice—is its special organ."—See writings of Gall, Spurzheim, and Combe.

"If it be true that the multitudinous cerebral fibres act always in the same specific fasciculi, or in the same combination of specific fasciculi, in order to produce the same faculty in the same process of ratiocination, then phrenology is so far true; and if the action of these fasciculi has the effect

#### PHRENOLOGY-

of elongating them, so as to produce pressure on the corresponding internal surface of the cranium, and if the bony case make a corresponding concession of space to the elongation of these specific fasciculi, then *cranioscopy* is true also; but there are so many arbitrary assumptions in arriving at such a result, that a vastly greater mass of evidence must be brought forward before phrenologists and cranioscopists have a right to claim general assent to their doctrine."—Wigan, *Duality of Mind*, p. 162.

PHYSIOGNOMY (φύσις, nature; γνώμων, an index) is defined by Lavater to be the "art of discovering the *interior* of man from his *exterior*." In common language it signifies the judging of disposition and character by the features of the face. In the Middle Ages, *physiognomy* meant the knowledge of the *internal* properties of any corporeal existence from *external* appearances.

"They found I' the physiognomies
Of the planets, all men's destinies."—Hudibras.

It does not appear that among the ancients physiognomy was extended beyond man, or at least beyond animated nature. The treatise on this subject ascribed to Aristotle is thought to be spurious. But all men, in the ordinary business of life, seem to be influenced by the belief that the disposition and character may in some measure be indicated by the form of the body, and especially by the features of the face.

"Every one is in some degree a master of that art which is generally distinguished by the name of *Physiognomy*, and naturally forms to himself the character or fortune of a stranger from the features and lineaments of his face. We are no sooner presented to any one we never saw before, but we are immediately struck with the idea of a proud, a reserved, an affable, or a good-natured man; and upon our first going into a company of strangers, our benevolence or aversion, awe or contempt, rises naturally towards several particular persons before we have heard them speak a single word, or so much as know who they are."—Addison, *Spectator*, No. 86.

The taking a prejudice against a person for his looks is reckoned among the smaller vices in morality, and is called by More in his *Enchiridion Ethicum*, *Prosopolepsia*.

### PHYSIOGNOMY—

See Lavater, Spurzheim. J. Cross, Attempt to Establish Physiognomy upon Scientific Principles, Glasg. 1817.

PHYSIOLOGY and PHYSICS were formerly used as synonymous. The former now denotes the laws of organized bodies, the latter of unorganized. The former is distinguished into animal and vegetable. Both imply the necessity of nature as opposed to liberty of intelligence, and neither can be appropriately applied to mind. Dr. Brown, however, entitled the first part of one of his works, the Physiology of mind.—V. PSYCHOLOGY.

Physiology determines the matter and the form of living beings. It describes their structure and operations, and then ascends from phenomena to laws; from the knowledge of organs and their actions it concludes their function and their end or purpose; and from among the various manifestations it seeks to seize that mysterious principle which animates the matter of their organization, which maintains the nearly constant form of the compound by the continual renewal of the component molecules, and which at death, leaving this matter, surrenders it to the common laws, from the empire of which it was for a season withdrawn.

touch and see—matter and its modifications.—Dict. des Sciences Philosoph. [It is the province of Physiology, in dealing with the brain and the whole nervous system to trace the conditions of our feeling and knowledge from without as far as possible towards the inner circle of experience. It is the province of Psychology to trace the conditions of our knowledge and feeling from within as far as possible towards the outer world. As to scientific results in the former department, see Carpenter's Mental Physiology; Maudsley's Physiology and Pathology of Mind.—Ed.]

with the spirit of a painter, and it was thus, if I am not much mistaken, that the word was commonly employed when it was first adopted in England. . . . But is has been frequently employed to denote those combinations or groups or attitudes of objects that are fitted for the purposes of the painter."—Stewart, Philosoph. Essays, part i. ch. 5.

"Picturesque is a word applied to every object, and every

# PICTURESQUE-

kind of scenery, which has been or might be represented with good effect in painting—just as the word beautiful, when we speak of visible nature, is applied to every object and every kind of scenery that in any way give pleasure to the eye—and these seem to be the significations of both words, taken in their most extended and popular sense."—Sir Uvedale Price, On the Picturesque, ch. 3.

"The two qualities of roughness and of sudden variation, joined to that of irregularity, are the most efficient causes of

the picturesque." \*-Ibid.

"Beauty and picturesqueness are founded on opposite qualities; the one on smoothness, the other on roughness; the one on grandeur, the other on sudden variation; the one on ideas of youth and freshness, the other on those of age, and even of decay."—Ch. 4.

PLASTIC MEDIUM is one of the hypothesis as to the communication between soul and body. "It is partly material, partly spiritual. As material, it can be acted on by the body; and as spritual, it can act upon the mind. It is a bridge thrown over the abyss which separates matter from spirit. This hypothesis annihilates itself. Between an extended and unextended substance there can be no middle existence; these being not simply different in degree, but contradictory. If the medium be neither body nor soul, it is a chimera; if it is at once body and soul, it is contradictory; or if to avoid the contradiction, it is said to be, like us, the union of soul and body, it is itself want of a medium."—Lavomiquiere, Leçons, tom. ii. pp. 253, 254.

PNEUMATICS is now applied to physical science, and means that department of it which treats of the mechanical properties of air and other elastic fluids. It was formerly used as

synonymous with pneumatoloy.

PNEUMATOLOGY (πνεῦμα, spirit; λόγος, discourse.—The branch of philosophy which treats of the nature and operations of mind, has by some been called *pneumatology*. Considered as the science of mind or spirit, *pneumatology* consisted of three

<sup>\* &</sup>quot;A picturesque object may be defined as that which, from the greater facilities which it possesses for readily and more effectually enabling an artist to display his art, is, as it were, a provocation to painting."—Sir Thos. L. Dick, note to above chap.

## PNEUMATOLOGY-

parts, treating of the Divine mind, Theology—the angelic mind, Angelology, and the human mind.

Bp. Berkeley (*Principles of Human Knowledge*, see. 81, and throughout) admits the existence of orders of spirits.

POETRY or POESY.—" However crities may differ as to the definition of poetry, all competent to offer an opinion on the subject will agree that oeeasionally, in prose, as well as in verse, we meet with a passage to which we feel that the term poetry could be applied, with great propriety, by a figure of speech. In the other arts also we find, now and then, what we feel prompted from within to eall the poetry of painting, of statuary, of music, or of whatever art it may be. The fact that books have been written under such figurative titles, and favourably received, proves that the popular mind conceives of something in poetry besides versification—of some spiritual excellence, most properly belonging to compositions in verse, but which is also found elsewhere. When Byron said that few poems of his day were half poetry, he evidently meant by poetry something distinguishable from rhythm and rhyme. True, such may be only a figurative use of the word; but the public aecept that figurative use as eorresponding to some actual coneeption which they entertain of poetry in its best degrees. And when they speak of the poetry of any other art, it is evident from the use of the same word that they believe themselves perceiving the same or similar qualities. To such eoneeptions, then, without regard to whence they spring, I think, with Coleridge, that it would be expedient to appropriate the word poesy, thereby avoiding the ambiguity which now exists in the use of the word poetry; though popular ehoice, which always prefers a figurative application of a eommon word, has not adopted the suggestion."—Moffat, Study of Æsthetics, p. 221.

polygamy (πολύς, many; γάμος, marriage), a plurality of wives or husbands. It has prevailed under various forms in all ages of the world. It can be shown, however, to be contrary to the light of nature; and has been condemned and punished by the laws of many nations. About the middle of the sixteenth century, Bernardus Ochinus, general of the order of Capuchins, and afterwards a Protestant, published Dialogues in favour of polygamy, to which Theodore Beza wrote a reply.

### POLYGAMY-

In 1682, a work entitled *Polygamia Triumphatrix* appeared under the name of Theophilus Aletheus. The true name of the author was Lyserus, a native of Saxony. See some sensible remarks on this subject in Paley's *Moral* and *Political Philosophy*, bk. iii. ch. 6; Dr. Delany, *Reflections upon Polygamy*, 8vo, Lond. 1737.

**POLYTHEISM**  $(\pi \circ \lambda \circ '_{5}, \text{ many }; \theta \circ '_{5}, \text{ god})$ .—"To believe no one supreme designing principle or mind, but rather two, three, or more (though in their nature good), is to be a polytheist."—

Shaftesbury, bk. i. part i. sec. 2.

Three forms of polytheism may be distinguished. 1. Idolatry, or the worship of idols and false gods, which prevailed in Greece and Rome. 2. Sabaism, or the worship of the stars and of fire, which prevailed in Arabia and in Chaldea. 3. Fetichism, or the worship of anything that strikes the imagination and gives the notion of great power, which prevails in Africa and among savage nations in general.

POSITIVE.—[1. In its more general acceptation, affirmative. 2. More restrictedly, realistic, in contrast with imaginative and rationalized. 3. Applied to a command, it distinguishes what is the expression of the will of the ruler, from moral law, which is essentially right.—Ed.].—V. MORAL TERM.

POSITIVISM.—[The name given by Comte to his system of philosophy, as professedly based upon facts, and expressly denying the possibility of any knowledge of causes. It is a philosophy of uniform sequences.—Ed.] "One man affirms that to him the principle of all certitude is the testimony of the senses; this

is positivism."—Morell, Philosoph. Tenden., p. 15.

Of late years the name positivism has been appropriated to peculiar principles advocated by M. Auguste Comte, in his Cours de Philosophie Positive. This philosophy is thus described by an admirer (G. H. Lewes, Comte's Philosoph. of Sciences, 1853, sec. 1):—"This is the mission of positivism, to generalize science, and to systematize sociality; in other words, it aims at creating a philosophy of the sciences, as a basis for a new social faith. A social doctrine is the aim of positivism, a scientific doctrine the means; just as in a man, intelligence is the minister and interpreter of life.

"The leading conception of M. Comte is:—There are but three phases of intellectual evolution—the theological (super-

## POSITIVISM-

natural), the metaphysical, and the positive. In the supernatural phase, the mind seeks causes, unusual phenomena are interpreted as the signs of the pleasure or displeasure of some god. In the metaphysical phase, the supernatural agents are set aside for abstract forces inherent in substances. In the positive phase, the mind restricts itself to the discovery of the laws of phenomena."

POSSIBLE (possum, to be able).—That which may or can be. "Tis possible to infinite power to endue a creature with the power of beginning motion."—Clarke, On Attributes, prop. 10.

Possibilitas est consensio inter se, seu non repugnantia partium vel attributorum quibus res seu ens constituatur.

A thing is said to be *possible* when, though not actually in existence, all the conditions necessary for realizing its existence are given. Thus we say it is *possible* that a plant or animal may be born, because there are in nature causes by which this may be brought about. But as everything which is born dies, we say it is impossible that a plant or animal should live for ever. A thing is *possible*, when there is no contradiction between the idea or conception of it and the realization of it; and a thing is *impossible* when the conception of its realization or existence implies absurdity or contradiction.

There are three ways in which what is possible may be brought about; supernaturally, naturally, and morally. The resurrection of the dead is supernaturally possible, since it can only be realized by the power of God. The burning of wood is naturally or physically possible, because fire has the power to do so. It is morally possible that he who has often done wrong should yet in some particular instance do right. These epithets apply to the causes by which the possible existence or event is realized.

"Possible relates sometimes to contingency, sometimes to power or liberty, and these senses are frequently confounded. In the first sense we say, e.g., 'It is possible this patient may recover,' not meaning that it depends on his choice, but that we are not sure whether the event will not be such. In the other sense it is 'possible' to the best man to violate every rule of morality; since if it were out of his power to act so if he chose it, there would be no moral goodness in the case, though

### POSSIPLE-

we are quite sure that such never will be his choice."—Whately,

Log., App. i.

POSTULATE (αἴτημα, postulatum, that which is asked or assumed in order to prove something else).—" According to some, the difference between axioms and postulates is analogous to that between theorems and problems; the former expressing truths which are self-evident, and from which other propositions may be deduced; the latter operations which may be easily performed, and by the help of which more difficult constructions may be effected."—Stewart, Elements, vol. ii. ch. 2, sec. 3 (from Wallis).

There is a difference between a postulate and a hypothesis. When you lay down something which may be, although you have not proved it, and which is admitted by the learner or the disputant, you make a hypothesis. The postulate not being assented to, may be contested during the discussion, and is only established by its conformity with all other ideas on the subject.

In the philosophy of Kant, a postulate is neither a hypothesis nor a corollary, but a proposition of the same binding certainty, or whose certainty is incorporated with that of another, so that you must reject that other, all evident as it is in self, or admit at the same time what it necessarily supposes. He has three

postulates.

1. I am under obligation, therefore I am free.

- 2. Practical reason tends necessarily to the sovereign good, which supposes an absolute conformity with the moral law; such conformity is holiness; a perfection which man can only attain by an indefinite continuity of effort and of progress. This progress supposes continuity of existence, personal and identical, therefore the soul is immortal, or the sovereign good is a chimera.
- 3. On the other hand, the sovereign good supposes felicity, but this results from the conformity of things with a will, and has for its condition, obedience to the moral law; there must then be a harmony possible between morality and felicity, and this necessarily supposes a cause of the universe distinct from nature,—an intelligent cause, who is at the same time the Author of the moral law, and guarantee of this harmony of virtue and happiness, from which results the sovereign good;

# POSTULATE-

then God exists, and is himself the primitive sovereign good, the source of all good. Kant's postulates of the practical reason are thus freedom, immortality, and God.—Willin, Hist. de la Philosoph. Allemande, tom. i. p. 420.

POTENTIAL, is opposed to actual. This antithesis is a fundamental doctrine of the Peripatetic philosophy. "Aristotle saith, that divided they (i.e., bodies) be in infinitum potentially, but actually not."—Holland, Plutarch, p. 667.

"Anaximander's infinite was nothing else but an infinite chaos of matter, in which were either actually or potentially contained all manner of qualities."—Cudworth, Intell. System, p. 128. See Sir W. Hamilton leet i. p. 179.

p. 128. See Sir W. Hamilton, lect. i. p. 179. **POTENTIALITY** (δύναμις).—V. CAPACITY.

POWER (possum, to be able; in Greek, δύναμις).-[In its widest use,—Force, as when we speak of water-power. More properly, that which originates action. For the knowledge of this we are led ultimately to our own personality. -Ed.] "Power, says Mr. Locke (Essay on Hum. Understand., bk. ii. ch. 21), "may be considered as twofold, viz., as able to make, or able to receive, any change: the one may be called active, and the other passive power." Dr. Reid, in reference to this distinction, says (Act. Pow., essay i. ch. 3), "Whereas he distinguishes power into active and passive, I conceive passive power to be no power at all. He means by it the possibility of being changed. To call this power seems to be a misapplication of the word. I do not remember to have met with the phrase passive power in any other good anthor. Mr. Locke seems to have been unlucky in inventing it; and it deserves not to be retained in our language." "This paragraph," says Sir W. Hamilton (Reid's Works, p. 519, note), "is erroneous in almost all its statements." The distinction between power as active and passive, is clearly taken by Aristotle. But he says that in one point of view they are but one power (Metaphys., lib. v. cap. 12), while in another they are two (Metaphys., lib. ix. cap. 1). This distinction has been generally admitted by subsequent philosophers. Dr. Reid, however, only used the word power to signify active power. That we have the idea of

Hume (Act. Pow., essay i. ch. 2, 4).

According to Mr. Hume, we have no proper notion of

power, and how we come by it, he shows in opposition to

POWER-

power. It is a mere relation which the mind conceives to exist between one thing going before, and another thing coming after. All that we observe is merely antecedent and consequent. Neither sensation nor reflection furnishes us with any idea of power or efficacy in the antecedent to produce the consequent. The views of Dr. Brown are somewhat similar. It is when the succession is constant—when the antecedent is uniformly followed by the consequent, that we call the one cause, and the other effect; but we have no ground for believing that there is any other relation between them or any virtue in the one to originate or produce the other, that is, that we have no proper idea of power. Now, that our idea of power cannot be explained by the philosophy which derives all our ideas from sensation and reflection, is true. Power is not an object of sense. All that we observe is succession. But when we see one thing invariably succeeded by another, we not only connect the one as effect and the other as cause, and view them under that relation, but we frame the idea of power, and conclude that there is a virtue, an efficacy, a force, in the one thing to originate or produce the other; and that the connection between them is not only uniform and unvaried, but universal and necessary. This is the common idea of power, and that there is such an idea framed and entertained by the human mind cannot be The legitimacy and validity of the idea can be fully denied. vindicated.

"In the strict sense, power and agency are attributes of mind only; and I think that mind only can be a cause in the strict sense. This power, indeed, may be where it is not exerted, and so may be without agency or causation; but there can be no agency or causation without power to act and to produce the effect. As far as I can judge, to everything we call a cause we ascribe power to produce the effect. In intelligent causes, the power may be without being exerted; so I have power to run when I sit still or walk. But in inanimate causes we conceive no power but what is exerted, and, therefore, measure the power of the cause by the effect which it actually produces. The power of an acid to dissolve iron is measured by what it actually dissolves. We get the notion of active power, as well as of cause and effect, as I

POWER-

think, from what we feel in ourselves. We feel in ourselves a power to move our limbs, and to produce certain effects when we choose. Hence we get the notion of power, agency, and causation, in the strict and philosophical sense; and this I take to be our first notion of these three things."—Dr. Reid, Correspondence, pp. 77, 78. See Day, On the Will. p. 33.

It is usual to speak of a power of resistance in matter; and of a power of endurance in mind. Both these are passive power. Active power is the principle of action, whether immanent or transient. Passive power is the principle of bearing or receiving.

Aristotle, Mctaphys., lib. viii. cap. 1; Locke, Essay on Hum. Understand., bk. ii. ch. 21; Hobbes, Opera, tom. i. p. 113, ed. by Molesworth.

PRACTICAL (German, praktisch).—[Kant's expression for the Reason when regarded as the guide of Will, in contrast with Reason regarded as a purely knowing power.—Ed.] The strict meaning of this word in the philosophy of Kant, is immediate will-determining, and the Critick of Practical Reason is nothing else but the critick of that faculty of reason which immediately determines the will.—Haywood, Critick of Pure Reason, p. 401.

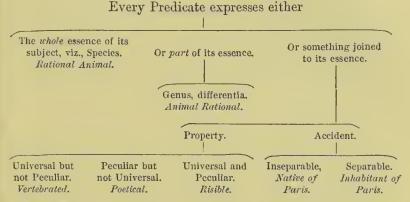
PRÆDICATE, PRÆDICABLE, and PRÆDICAMENT, are all derived from prædico, to affirm. A prædicate is that which is actually affirmed of any one, as wisdom of Peter. A prædicable is that which may be affirmed of many, as sun may be affirmed of other suns besides that of our system. A prædicament is a series, order, or arrangement of predicates and prædicables in some summum genus, as substance, or quality.

What is affirmed or denied is called the pradicate; and that of which it is affirmed or denied is called the subject.—Monboddo, Ancient Metaphys., vol. v. p. 152.—V. Attribute, Category, Universal.

Prædicables.—"Whatever term can be affirmed of several things, must express either their whole essence, which is called the species; or a part of their essence (viz., either the material part, which is called the genus, or the formal and distinguishing part, which is called differentia, or in common discourse, characteristic), or something joined to the essence; whether

## PRÆDICATE—

necessarily (i.e., to the whole species, or in other words, universally, to every individual of it), which is called a property; or contingently (i.e., to some individuals only of the species), which is an accident.



Taking Mun as the subject, the words in italics will give predicates of the different kinds.

"Genus, species, differentia, proprium, accidens, might, with more propriety perhaps, have been called the *five classes of predicates*; but use has determined them to be called the *five predicables*."—Reid, Account of Aristotle's Logic.

Prædicament.—These most comprehensive signs of things (the categories), are called in Latin the *prædicaments*, because they can be said or *prædicated* in the same sense of all other terms, as well as of all the objects denoted by them, whereas no other term can be correctly said of them, because no other is employed to express the full extent of their meaning."—Gillies, Analysis of Aristotle, ch. 2.

Præ-prædicamenta and Post-Prædicamenta.—"The Greek Logicians divided their speculations on this subject into three sections, calling the first section τὸ πρὸ τῶν κατηγορίῶν; the second, τὸ περὶ αὐτῶν κατηγορίῶν; the third, τὸ μετὰ τὰς κατηγορίας.—Ammon. in Prædic., p. 146. The Latins adhering to the same division, coin new names: ante-prædicamenta, or præ-prædicamenta, prædicamenta and post-prædicamenta."—Sanderson, pp. 22, 51, 55, ed. Oxon. 1672.

PREJUDICE (præjudico, to judge before inquiry).—A prejudice is a pre-judging, that is forming or adopting an opinion con-

### PREJUDICE—

cerning anything, before the grounds of it have been fairly or fully considered. The opinion may be true or false, but in so far as the grounds of it have not been examined, it is erroneous or without proper evidence. "In most cases prejudices are opinions which, on some account, men are pleased with, independently of any conviction of their truth; and which, therefore they are afraid to examine, lest they should find them to be false. Prejudices, then, are unreasonable judgments, formed or held under the influence of some other motive than the love of truth. They may therefore be classed according to the nature of the motives from which they result. These motives are, either, 1, Pleasurable, innocent, and social; or, 2, They are malignant."—Taylor, Elements of Thought.

Dr. Reid (Intell. Pow., essay vi. ch. 8) has treated of prejudices or the causes of error, according to the classification given of them by Lord Bacon, under the name of idols.—Mr. Locke has treated of the causes of error (Essay on Hum. Understand., bk. iv. ch. 20). And some excellent observations on the prejudices peculiar to men of study, may be seen in Malebranche, Search after Truth, bk. ii. part 2.

PREMISS (propositiones pramissae, propositions which go before the conclusion, and from which it is inferred).—A regular syllogism consists of two premisses and a conclusion. The two premisses are sometimes called the antecedent, and the conclusion the consequent.

prescience of God is so vast and exceeding the comprehension of our thoughts, that all that can be safely said of it is this, that this knowledge is most exquisite and perfect, accurately representing the natures, powers, and properties of the thing it does foreknow."—More, Immortality of Soul, bk. ii. ch. 4.

The prescience of God may be argued from the perfection of his nature. It is difficult or rather impossible for us to conceive of it, because we have no analogous faculty. Our obscure and inferential knowledge of what is future, is not to be likened to his clear and direct\* beholding of all things.

<sup>\*</sup> When the late Sir James Mackintosh was visiting the school for the deaf and dumb at Paris, then under the care of the Abbé Sicard, he is said to have addressed this question in writing to one of the pupils,—" Doth God reason?" The pupil for a short time appeared to be distressed and confused, but presently wrote on his slate the

### PRESCIENCE-

Many attempts have been made to reconcile the prescience of God with the liberty of man. Each truth must rest upon its own proper evidence.—St Augustin, On the Spirit and the Letter; Bossuet, Traité du Libre Arbitre; Leibnitz, Theodicée; Fenelon, Existence de Dieu.

PRESENTATIVE.—V. KNOWLEDGE.

PRIMARY (primus, first) is opposed to secondary. "Those qualities or properties, without which we cannot even imagine a thing to exist, are called primary qualities. Extension and solidity are called primary qualities of matter—colour, taste, smell, are called secondary qualities of matter."—Taylor, Elements of Thought.

Descartes, Locke, Reid, Stewart, Phil. Essays, ii. ch. 2; Sir

W. Hamilton, Reid's Works, note D.—V. MATTER.

The most obvious mode of stating the difference of primary and secondary qualities, appears to be that employed by Locke, slightly modified. Certain of the qualities of bodies, as their bulk, figure, and motion, are perceived immediately in the bodies themselves. Certain other qualities, as sound, colour, heat, are perceived by means of some medium. Our conviction that this is the case is spontaneous and irresistible; and this difference of qualities immediately and mediately perceived is the distinction of Primary and Secondary qualities."—Whewell, Hist. of Scient. Ideas, vol. i. p. 296.

PRINCIPIA ESSENDI or PRINCIPLES OF BEING are distinguished into the *principle* of origination and the *principle* of dependence.

The only proper principle of origination is God, who gives

essence and existence to all beings.

The principle of dependence is distinguished into that of causality and that of inherence, or effective dependence, as the effect depends upon its cause, and subjective dependence, as the quality inheres or depends on its subject or substance.

PRINCIPLE (principium, ἀξχή, a beginning).—"A principle is that which being derived from nothing, can hold of nothing. 'Principio autem nulla est origo,' said Cicero, 'num ex principio oriuntur omnia: ipsum autem nulla ex re; nec enim id esset

following answer:—"To reason is to hesitate, to doubt, to inquire: it is the highest attribute of a *limited* intelligence. God sees all things, foresees all things, knows all things; therefore God doth not reason."—Gurney, On Habit and Discipline, p. 138.

# PRINCIPLE—

principium quod gignerctur aliunde.'"—Sir Will. Drummond, Acad. Quest., p. 5,

Aristotle (Metaphys., lib. iv. cap. 1) has noticed several meanings of  $\lambda e \chi \dot{\eta}$ , which is translated principle, and has added—"What is common to all first principles is that they are the primary source from which anything is, becomes, or is known."

The word is applied equally to thought and to being; and hence principles have been divided into those of being and those of knowledge, or principia essendi and principia cognosecndi, or, according to the language of German philosophers, principles formal and principles real. Principia essendi may also be principia cognosecndi, for the fact that things exist is the ground or reason of their being known. But the converse does not hold; for the existence of things is in no way dependent upon our knowledge of them.

Ancient philosophy was almost exclusively occupied with principles of being, investigating the origin and elements of all things, while, on the other hand, modern philosophy has been chiefly devoted to principles of knowledge, ascertaining the laws and elements of thought, and determining their validity

in reference to the knowledge which they give.

PRINCIPLES OF KNOWLEDGE are those truths by means of which other truths are known. They have been distinguished into simple and complex, that is, they may be found in the form of ideas, as substance, cause—or in the form of propositions, as in the affirmation that every change implies the operation of a cause, or in the negation that qualities do not exist without a substance. Complex principles have been arranged in three classes, viz., hypothesis, definitions, and axioms. Hypothesis and definitions have been called θετικά that is, conventional principles or truths assumed or agreed on for the purpose of disputation or teaching, and are confined to the department of knowledge to which they peculiarly belong, axioms are principles true in themselves, and extending to all departments of knowledge. These were called Φυσικά or εμφυτα, and are such as the mind of man naturally and at once accepts as true. They correspond with the first truths, primitive beliefs, or principles of common sense of the Scottish philosophy.

"The word principle," says Mr. Stewart (Elements, vol. i.

### PRINCIPLES-

ch. 1, sec. 2), "in its proper acceptation, seems to me to denote an assumption (whether resting on fact or on hypothesis) upon which, as a datum, a train of reasoning proceeds; and for the falsity or incorrectness of which no logical rigour in the subsequent process can compensate. Thus the gravity and the elasticity of the air are principles of reasoning, in our speculations about the barometer. The equality of the angles of incidence and reflection, the proportionality of the sines of incidence and refraction, are principles of reasoning in catoptrics and in dioptrics. In a sense perfectly analogous to this, the definitions of geometry (all of which are merely hypothetical) are the first principles of reasoning in the subsequent demonstration, and the basis on which the whole fabric of the science rests."

Lord Herbert, De Veritate; Buffier, Treatise of First Truths; Reid, Intell. Pow., essay vi.

Principles as Express or as Operative correspond to principles of knowing and of being. An express principle asserts a proposition; as, truth is to be spoken. An operative principle prompts to action or produces change, as when a man takes food to satisfy hunger. An express principle asserts an original law and is regulative. An operative principle is an original element and is constitutive.

principles which regulate or ought to regulate human action, or those operating or motive principles which prompt human action. The latter, which is the common application of the phrase, is its psychological meaning. [Either (1) the beginning as to knowledge, that is, the law of right conduct, as the principle of justice: or (2) the beginning as to energy or motive force, as the principle of self-love.—Ed.]

When applied to human action psychologically, the word principle is used in the sense of the principle of dependence; and to denote that the action depends upon the agent for its being produced. It may signify the dependence of causality, that is, that the action depends for its production on the agent, as its efficient cause; or it may signify the dependence of inherence, that is, that the action depends for its production on some power or energy which inheres in the agent as its subject. Hence is has been said that a principle of action is twofold—

### PRINCIPLES—

the principium quod, and the principium quo. Thus, man as an active being is the principium quod or efficient cause of an action being produced; his will, or the power by which he

determines to act, is the principium quo.

But the will itself is stimulated or moved to exert itself; and in this view may be regarded as the principium quod, while that which moves or stimulates it, may be regarded as the principium quo. Before we act, we deliberate, that is, we contemplate the action in its nature and consequences; we then resolve or determine to do it or not to do it, and the performance or omission follows. Volition, then, or an exercise of will, is the immediate antecedent of action. But the will is called into exercise by certain influences which are brought to bear upon it. Some object of sense or of thought is contemplated. We are affected with pleasure or pain. Feelings of complacency or displacency, of liking or disliking, of satisfaction or disgust, are awakened. Sentiments of approbation or disapprobation are experienced. We pronounce some things to be good, and others to be evil, and feel corresponding inclination or aversion; and under the influence of these states and affections of mind, the will is moved to activity. The forms which these feelings of pleasure or pain, of inclination or tendency to or from an object, may assume, are many and various; arising partly from the nature of the objects contemplated, and partly from the original constitution and acquired habits of the mind contemplating. But they are all denominated, in a general way, principles of action.

PRIVATION (στέςησις, privatio).—" A privation is the absence of what does naturally belong to the thing we are speaking of, or which ought to be present with it."—Watts, Log., part i. ch. 2.

Matter and form belong to all natural bodies. "To these Aristotle has added a third, which he calls orignous or privation, an addition that he has thought proper to make to the Pythagorean and Platonic philosophy, in order to give his system the appearance of novelty; but without any necessity, as I apprehend; for it is not a cause, as he himself admits, such as matter and form, but is only that without which the first matter could not receive the impression of any form; for it

#### PRIVATION-

must be clear of every form, which is what he calls privation before it can admit of any.

"Now, this is necessarily implied in the notion of matter; for as it has the capacity of all form, so it has the privation of all form. In this way, Aristotle himself has explained the nature of matter (Physic, lib. i. cap. 8). And Plato, in the Timaus, has very much insisted upon this quality of matter as absolutely necessary, in order to fit it to receive all forms; and he illustrates his meaning by a comparison:—Those, says he, who make unguents or perfumes, prepare the liquid so, to which they are to give the perfume, that it may have no odour of its own. And, in like manner, those who take off an impression of anything upon any soft matter, clear that matter of every other impression, making it as smooth as possible, in order that it may better receive the figure or image intended. In like manner, he says, matter, in order to receive the specieses of all things, must in itself have the species of nothing."—Monboddo, Ancient Metaphys., bk. ii. ch. 2. Hence privation was defined—Negatio formæ in subjecto apto ad habendam talem formam.

According to Plato, privation, in the sense of limitation, imperfection, is the inherent condition of all finite existence, and the necessary cause of evil.—Leibnitz, after Augustin, Aquinas, and others, held similar views. Causa Dei, sec. 69, 72; Essais Sur la Bonte de Dieu, 1 partie, sect. 29, 31—3 partie, sect. 378.—V. NEGATION.

# PROBABILITY.—V. CHANCES.

PROBABLE (probabilis, provable).—That which, while it does not admit of demonstration, yet does not involve absurdity or contradiction, is probable, or admits of proof. "As demonstration is the showing the agreement or disagreement of two ideas, by the intervention of one or more proofs, which have a constant, immutable, and visible connection one with another; so probability is nothing but the appearance of such an agreement or disagreement, by the intervention of proofs, whose connection is not constant and immutable, or at least is not perceived to be so, but is, or appears for the most part to be so, and is enough to induce the mind to judge the proposition to be true or false, rather than the contrary. . . . . The entertainment the mind gives this sort of propositions,

# PROBABLE—

is called belief, assent, or opinion, which is admitting or receiving any proposition for true, upon arguments or proofs that are found to persuade us to receive it as true, without certain knowledge that it is so. And herein lies the difference between probability and certainty, faith and knowledge, that in all the parts of knowledge there is intuition; each immediate idea, each step, has its visible and certain connection; in belief, not so. That which makes us believe, is something extraneous to the thing I believe; something not evidently joined on both sides to, and so not manifestly showing the agreement, or disagreement, of those ideas that are under consideration.

"The grounds of probability are first, the conformity of anything with our own knowledge, observation, and experience. Second, the testimony of others, touching their observation and experience."—Locke, *Essay on Hum. Understand.*, bk. iv. ch. 15; Reid, *Intell. Pow.*, essay vii. ch. 3.

"The word probable," says Mr. Stewart (Elements, part ii. ch. 2, sec. 4), "does not imply any deficiency in the proof, but only marks the particular nature of that proof, as contradistinguished from another species of evidence. It is opposed not to what is eertain, but to what admits of being demonstrated after the manner of the mathematicians. This differs widely from the meaning annexed to the same word in popular discourse; according to which, whatever event is said to be probable, is understood to be expected with some degree of doubt. . . . . But although, in philsophical language, the epithet probable be applied to events which are acknowledged to be certain, it is also applied to events which are called probable by the vulgar. The philosophical meaning of the word, therefore, is more comprehensive than the popular; the former denoting that particular species of evidence of which contingent truths admit; the latter being confined to such degrees of this evidence as fall short of the highest. These different degrees of probability the philosopher considers as a series, beginning with bare possibility, and terminating in that apprehended infallibility, with which the phrase moral certainty is synonymous. To this last term of the series, the word probable is, in its ordinary acceptation, plainly inapplicable."

PROBATION (probo, approbo, to prove).—To prove is to evince the truth of a proposition not admitted to be true, from other propositions the truth of which is already established. In every probation there are three things,—1. The thesis, the proposition to be proved; 2. The grounds or principle of proof; and, 3. The degree of urgency with which the thesis is inferred. The rules of probation are,—1. That no proposition be employed as a principle of probation, which stands itself in need of proof; 2. That nothing else be proved than the proposition for whose proof the probation was instituted.

PROBLEM (πεόβλημα, from πεοβαλλω, to throw down, to put in question).—Any point attended with doubt or difficulty, any proposition which may be attacked or defended by probable arguments, may be called a problem.

PROGRESS.—V. PERFECTIBILITY.

pledge to do something at a future time.] Promittimus rogati—pollicemur ultro.—A pollicitation is a spontaneous expression of our intention to do something in favour of another. It does not necessarily imply the presence of the party in reference to whom it is made; and it does not confer upon him a right to exact its performance. But in so far as it has become known to him, and has awakened expectations of its being performed, we may be brought under a moral obligation to perform it, especially if its performance is seen to be highly beneficial to him, and in no way prejudical to ourselves.

A promise is made in consequence of a request preferred to us. It implies the presence of the party preferring the request, or of some one for him, and confers upon him a perfect moral right to have it fulfilled, and brings us under a moral obligation to fulfil it. In order to constitute a promise, three things are necessary. 1. The voluntary consent or intention of the promiser. 2. The expression or outward signification of that intention. 3. The acceptance of the promise by the party to whom it is made.

A promise implies two parties at least—the promiser and the promisee. A pact implies two or more. In this it agrees with a contract—q.v.

It is a dictate of the law of nature, that promises should be

# PROMISE-

fulfilled,—not because it is expedient to do so, but because it is right to so.

The various questions concerning the parties competent to give a valid *promise*, the interpretation of the terms in which it may be given, and the cases in which the obligation to fulfil it may be relaxed or dissolved, belong to what may be called the *Casuistry of Ethies*, and *Natural Jurisprudence.—V*. Contract.

PROOF.—[Evidence confirmatory of a proposition.] "To conform our language more to common use, we ought to divide arguments into demonstrations, proofs, and probabilities. By proofs, meaning such arguments from experience as leave no room for doubt or opposition."—Hume, On the Understand., sec. 6, note. Whately says that proving may be defined, "the assigning of a reason or argument for the support of a given proposition," and inferring "the deduction of a conclusion from given premises. In the one case our conclusion is given, and we have to seek for arguments; in the other our premises are given, and we have to seek for a conclusion. Proving may be compared to the act of putting away any article into the proper receptacle of goods of that description, inferring to that of bringing out the article when needed."—

V. EVIDENCE, INFERENCE.

PROPERTY [1. That which pertains to a thing; 2. That which is the possession of a person.—Ed.] may be distinguished

from quality or attribute, and also from faculty.

Qualities are primary or secondary, essential or non-essential. The former are called attributes, and the latter properties. Extension is the attribute of matter, taste and smell are properties of body.

Faculty implies understanding and will, and so is applicable only to mind. We speak of the properties of bodies, but not of their faculties. Of mind we may say will is a faculty or property; so that while all faculties are properties, all properties

are not faculties.

PROPERTY (Generic) is the property of a subaltern genus, and which may be predicated of all the subordinate species. "Voluntary motion" is the generic property of "animal."

PROPERTY (Specific) is the property of an infima species, and which may be predicated of all the individuals con-

# PROPERTY-

tained under it. "Risibility" is the specific property of "man."

PROPOSITION.—A judgment of the mind expressed in words is

a proposition.

"A proposition, according to Aristotle, is a speech wherein one thing is affirmed or denied of another. Hence it is easy to distinguish the thing affirmed or denied, which is called the predicate, from the thing of which it is affirmed or denied, which is called the subject; and these two are called the terms of the proposition."—Reid, Account of Aristotle's Logic, ch. 2, sec. 6. The copula is often called a third term.

As to their substance, propositions are Categorical (subdivided into pure and modal), and Hypothetical (subdivided

into conditional and disjunctive).

A Categorical proposition declares a thing absolutely, as, "I love," or "Man is not infallible." These are pure categoricals, asserting simply the agreement and disagreement of subject and predicate. Modal categoricals assert the manner of agreement and disagreement between subject and predicate; as, "The wisest man may possibly be mistaken." "A prejudiced historian will probably misrepresent the matter."

A Hypothetical proposition asserts, not absolutely, but under a hypothesis. Such propositions are denoted by the conjunctions used in stating them. "If man is fallible, he is imperfect." This is called a conditional proposition, denoted by the conjunction "if." "It is either day or night." 'This is a disjunctive hypothetical, and is denoted by the disjunctive conjunction "either."

As to their quality, propositions are either affirmative or negative, according as the predicate is said to agree or not to agree with the subject. "Man'is' an animal." "Man'is not' perfect." As to their quantity, propositions are universal or particular, according as the predicate is affirmed or denied of the whole of the subject, or only of part of the subject. "All tyrants are miserable." "No miser is rich." "Some islands are fertile." "Most men are fond of novelty."

In reference to their quantity and quality together, propositions are designated by the vowels, A E I O. Asserit A, negat E, sed universality ambo. Asserit I, negat O, sed particularity ambo.

PROPRIETY (τὸ πρέπου, that which is fit or congruous to the agent, and the relations in which he is placed).—This, according to some, is that which characterizes an action as right, and an agent as virtuous.

Adam Smith (Theory of Mor. Sent., part vii. sec. 2, ch. 1) treats of those systems which make virtue consist in propriety. PROPRIUM (The) or Property is a predicable which denotes something essentially conjoined to the essence of the species. —Whately, Log., bk. ii. ch. 5, sec. 3.

Proprium is applied,—1. To what belongs to some one but not to all, as to be a philosopher in respect of man. 2. To what belongs to a species, but not to it only, as blackness in respect of a crow. 3. To what belongs to all of the species, and to that only, but not always, as to grow hoary in respect of man. 4. To what belongs to species, to all of it, to it only, and always, as laughter in respect of man. This last is truly the proprium. Quod speciei toti, soli et semper convenit.—Derodon, Log., p. 37; Crousaz, Art of Thinking, part i, sec. 3, ch. 5.

PROSYLLOGISM—V. EPICHEIREMA, EPISYLLOGISM.

PROVERB.—The editor of the fourth edition of Ray's *Proverbs* says, "A *proverb* is usually defined, an instructive sentence, or common and pithy saying, in which more is generally designed than expressed; famous for its peculiarity and elegance, and therefore adopted by the learned as well as the vulgar, by which it is distinguished from counterfeits, which want such authority."

Lord John Russell's definition of a *proverb* is, "the wit of one, the wisdom of many."—Moore, *Diary*, vol. vii. p. 204.

Proverbs embody the current and practical philosophy of an age or nation. Collections of them have been made from the earliest times. The book of Scripture called the Proverbs of Solomon, contains more than one collection. They have always been common in the East. Burckhardt made a collection of Arabian Proverbs, which was published at London in 1830. Seiler published at Augsburg, in 1816, The Wisdom of the Streets, or, the Meaning and Use of German Proverbs. Ray's Proverbs, Allan Ramsay's Proverbs, Henderson's Proverbs, have been published among ourselves.

Backer (Geo. de) has Le Dictionnaire de Proverbes Français, 8vo, 1710; rare and curious. Panckouke published his Die-

# PROVERB-

tionnaire des Proverbes in imitation of it. Giuseppe Giuste has a collection of Tuscan Proverbs, with notes, Florence 1858; Trench, Proverbs and their Lessons.

D'Israeli, in his *Curiosities of Literature*, has a chapter on the philosophy of Proverbs.

Baur said, "The genius, wit, and wisdom of a nation are discovered by their proverbs."

Scottish Proverbs, gathered together by David Ferguson, sometime minister at Dunfermline, and put ordine alphabetico when he departed this life, anno 1598. Edin. 1641.

A complete collection of Scottish Proverbs, by James Kelly, M.A. Lond. 1721.

The Proverbs of Scotland, by Alexander Hislop, 12mo, Glasg. 1562.

PROVIDENCE.—"What in opposition to Fate," said Jacobi, "constitutes the ruling principle of the universe into a true God, is *Providence*."

Providence implies conservation and superintending, or upholding and governing. Whatever is created can have no necessary nor independent existence; the same power which called it into being must continue to uphold it in being. And if the beauty and order which appear in the works of nature prove them to be the effects of an intelligent designing cause, the continuance of that beauty and order argues the continued operation of that cause. So that the same arguments which prove the existence of God imply his providence. With regard to the extent of providence, some have regarded it as general, and reaching only to things regarded as a whole, and to great and important results, while others regard it as particular, and as embracing every individual and every event. But the same arguments which prove that there is a providence, prove that it must be particular; or rather, when properly understood, there is no inconsistency between the two views. The providence of God can only be called general from its reaching to every object and event, and this is the sense in which we are to understand a particular providence. But while the providence of God extends to every particular, it proceeds according to general laws. And while these laws are fixed and stable, they may be so fixed as to admit of what we think deviations; so that both what we call the law, and what we

# PROVIDENCE-

call the deviation from the law, may be embraced in the plan of providence. As to the way in which this plan is carried forward, some have had recourse to the supposition of a plastic nature, intermediate between the Creator and the creature,—others to an energy communicated from the Creator to the creature. But the true view is to regard all things and all events as upheld and governed by the continual presence and power of God. There is a difficulty in reconciling this view with the freedom and responsibility of man, but it is not impossible to do so.—Sherlock, On Providence; McCosh, Meth. of Div. Govern., bk. ii. ch. 2.

PRUDENCE (prudentia, contracted for providentia, foresight or forethought) is one of the virtues which were called cardinal by the ancient ethetical writers. It may be described as the habit of acting at all times with deliberation and forethought [in view of the lessons of experience]. It is equally removed from rashness on the one hand, and timidity or irresolution on the other. It consists in choosing the best ends, and prosecuting them by the most suitable means. It is not only a virtue in itself, but necessary to give lustre to all the other virtues.

"The rules of prudence in general, like the laws of the stone tables, are for the most part prohibitive. Thou shalt not is their characteristic formula: and it is an especial part of Christian prudence that it should be so. Nor would it be difficult to bring under this head all the social obligations that arise out of the relations of the present life, which the sensual understanding (τὸ Φρόνημα τῆς σαρκός, Rom. viii. 6) is of itself able to discover, and the performance of which, under favourable circumstances, the merest worldly self-interest, without love or faith, is sufficient to enforce; but which Christian prudence enlivens by a higher principle and renders symbolic and sacramental (Eph. v. 32)."

"Morality may be compared to the consonant; prudence to the vowel. The former cannot be uttered (reduced to

practice) but by means of the latter.

"The Platonic division of the duties of morality commences with the prudential or the habit of act and purpose proceeding from enlightened self-interest (qui animi imperio, corporis servitio, rerum auxilio, in proprium sui commodum et sibi

#### PRUDENCE-

providus utitur, hunc esse prudentem statuimus); ascends to the moral, that is, to the purifying and remedial virtues; and seeks its summit in the imitation of the divine nature. In this last division, answering to that which we have called the spiritual, Plato includes all those inward acts and aspirations, waitings, and watchings, which have a growth in godlikeness for their immediate purpose, and the union of the human soul with the supreme good as their ultimate object."—Coleridge, Aids to Reflection, vol. i. pp. 13, 21, 22.

—V. MORALITY.

PSYCHIC and PSYCHICAL.—[Pertaining to the soul. Applied to force and phenomena distinctive of mind. Used in con-

trast with physical.—Ed.]

PSYCHISM (from  $\psi v_{\chi \acute{\eta}}$ , soul) is the word chosen by Mons. Quesne (Lettres sur le Psychisme, 8vo, Paris, 1852) to denote the doctrine that there is a fluid, diffused throughout all nature, animating equally all living and organized beings, and that the difference which appears in their actions comes of their particular organization. The fluid is general, the organization is individual.

This opinion differs from that of Pythagoras, who held that the soul of a man passed individually into the body of a brute. He (Mons. Quesne) holds that while the body dies the soul does not; the organization perishes, but not the

psychal or psychical fluid.

of the nature and powers of the Mind, based upon the analysis and interpretation of the facts of consciousness.—Ed.] The name may be new, but the study is old. It is recommended in the saying ascribed to Socrates—Know thyself. The recommendation is renewed in the Cogito ergo sum of Descartes; and in the writings of Malebranche, Arnauld, Leibnitz, Locke, Berkeley, and Hume, psychological inquiries held a prominent place. Still further prominence was given to them by the followers of Kant and Reid, and Psychology, instead of being partially treated as an introduction to Logic, to Ethics, and to Metaphysics, which all rest on it, is now treated as a separate department of science. It is that knowledge of the mind and its faculties which we derive from a careful examination of the facts of consciousness. Life and the functions of

# PSYCHOLOGY-

our organized body belong to physiology; and, although there is a close connection between sonl and body, and mutual action and reaction between them, that is no reason why the two departments of inquiry should be confounded, unless to those who think the soul to be the product or result of bodily organization. Broussais said, he could not understand those philosophers who shut their eyes and their ears in order to hear themselves think. But if the capacity of thinking be anterior to, and independent of, sense and bodily organs, then the soul which thinks, and its faculties or powers of thinking, deserve a separate consideration.—See Memoire, par Mons. Jouffroy, De la Legitimité et de la Distinction de la Psychologie et de la Physiologie (published in his Nouveaux Melanges, and also in the 11th vol. of Memoires de l'Acad. des Sciences Morales et Politiques).

Mr. Stewart (Prelim. Diss. to Philosoph. Essays, p. 24) objects to the use of the term psychology, though it is sanctioned by Dr. Campbell and Dr. Beattie, as implying a hypothesis concerning the nature or essence of the sentient or thinking principle, altogether unconnected with our conclusions concerning its phenomena and general laws. The hypothesis implied is that the sentient or thinking principle is different in its nature or essence from matter. But this hypothesis is not altogether unconnected with its phenomena. On the contrary, it is on a difference of the phenomena which they present that we ground the distinction between mind and matter. And all that is implied in using the term psychology is, that the phenomena of the sentient or thinking principle are different from the phenomena of matter. Psychology is "a term to which no competent objection can be made, and which affords us, what the various clumsy periphrases in use do not, a convenient adjective—psychological."—Sir W. Hamilton, Reid's Works, p. 219, note; Lects. i. 136.

Coleridge, in his Treatise upon Method, employs the word psychological, and apologizes for using an insolens verbum. "Goclemius is remarkable as the anthor of a work, the title of which is ψυχολογία (Marburg, 1594). This I think the first appearance of psychology, under its own name, in modern philosophy. Goclemius had, as a pupil, Otto Casmann, who wrote Psychologia Anthropologica, sive anima humana doctrina

#### PSYCHOLOGY-

(Hanan, 1594)."—Cousin, *Hist. of Mod. Philos.*, translated by Wright, vol. ii. p. 45. Hamilton's *Lects. on Metaph*. i. 135.

Psychology has been divided into two parts—1. The empirical, having for its object the phenomena of consciousness and the faculties by which they are produced. 2. The rational, having for its object the nature or substance of the soul, its

spirituality, immutability, &c.

Rational Psychology, which had been chiefly prosecuted before his day, was assailed by Kant, who maintained that apart from experience we can know nothing of the soul. But even admitting that psychology rests chiefly on observation and experience, we cannot well separate between phenomena and their cause, nor consider the cause apart from the phenomena. There are, however, three things to which the psychologist may successively attend. 1. To the phenomena of consciousness. 2. To the faculties to which they may be referred. 3. To the Ego, that is, the soul or mind in its unity, individuality, and personality. These three things are inseparable; and the consideration of them belongs to psychology. Subsidiary to it are inquiries concerning the mutual action and reaction of soul and body, the effect of organization, temperament, age, health, disease, country, climate, &c.

Nemesius, De Natura Hominis; Buchanan (David), Historia Anima Humana; Casmannus, Psychologia; Carus, History of

Psychology, 8vo, Leipsig, 1808, in German.

PSYCHOPANNYCHISM ( $\psi\nu\chi\dot{\eta}$ , soul; and  $\pi\tilde{\alpha}\nu$ , all;  $\nu\dot{\nu}\xi$ , night—the sleep of the soul) is the doctrine to which Luther, among divines, and Formey, among philosophers, were inclined—that at death the soul falls asleep and does not 'awake till the resurrection of the body.

PURE.—[Applied by Kant to an exercise of mind which has no admixture of the results of experience,—involving only what the mind itself gives; and also to the power of mind by which such exercise is possible. Thus he uses the "pure Idea," and "pure Reason," which is Reason in itself alone, without any mixture of sensibility, or play of the sensory. So also "pure Reverence" is reverence for moral law, when that is the sole or single motive for action.—Ed].

PYRRHONISM.—V. SCEPTICISM, ACADEMICS.

# QUADRIVIUM.—V. TRIVIUM.

QUALITY (ποῖος, ποιότης, qualis, qualitas, suchness) is the difference which distinguishes substances.

"There may be substances devoid of quantity, such as the intellective and immaterial (but that there should be substances devoid of quality, is a thing hardly credible, because they could not then be characterized and distinguished from one another."—Harris, Phil. Arrange., ch. 8.

"Whatsoever the mind perceives in itself, or is the immediate object of perception, thought, or understanding, that I call *idea*; and the power to produce any idea in our mind I call the *quality* of the subject wherein that power is."—Locke, Essay on Hum. Understand., bk. ii. ch. 8, sec. 8.

"We understand by a quality that which truly constitutes the nature of a thing—what it is—what belongs to it permanently, as an individual, or in common with others like it—not that which passes, which vanishes, and answers to no lasting judgment. A body falls: it is a fact, an accident: it is heavy, that is a quality. Every fact, every accident, every phenomenon, supposes a quality by which it is produced, or by which it is undergone: and reciprocally every quality of things which we know by experience manifests itself by certain modes or certain phenomena; for it is precisely in this way that things discover themselves to us."—Dict. des Sciences Philosoph.

Descartes (Princip. Philosoph., pars prima, sec. 56) says,—
"Et hie quidem per modos plane idem intelligimus, quod alibi
per attributa vel qualitates. Sed eum consideramus substantiam
ab illis affici, vel variari, vocamus modos; cum ab ista variatione
talem posse denominare, vocamus qualitates; ac denique, cum
generalius spectamus tantum ea substantia inesse, vocamus attributa. Ideoque in Deo non proprie modos aut qualitates
sed attributa tantum esse dicimus, quia nulla in eo variatio
est intelligenda. Et etiam in rebus ereatis, ea qua uunquam
in iis diverso modo se habent, ut existentia et duratio in re
existente et durante, non qualitates aut modi, sed attributa dici
debent."

Qualities are distinguished as essential, or such as are inseparable from the substance—as thought from mind, or extension from matter; and non-essential, or such as we can separate in conception from the substance—as passionateness or QUALITY—

mildness from mind, or heat or cold from matter. Qualities

are also divided into natural and acquired.

"With respect to all kinds of qualities, there is one thing to be observed, that some degree of permanence is always requisite; else they are not so properly qualities as incidental affections. Thus we call not a man passionate, because he has occasionally been angered, but because he is prone to frequent anger; nor do we say a man is of a pallid or a ruddy complexion, because he is red by immediate exercise or pale by sudden fear, but when that paleness or redness may be called constitutional."—Harris, *Phil. Arrange.*, ch. 8.

On the question, historical and critical, as to the distinction of the qualities of matter as primary or secondary, see Reid's

Works, by Sir W. Hamilton, note D.

Quality (Occult).—"It was usual with the Peripatetics, when the cause of any phenomena was demanded, to have recourse to their faculties or occult qualities, and to say, for instance, that bread nourished by its nutritive faculty (quality); and senna purged by its purgative.—Hume, Dial. on Nat.

Reliq., part iv.

"Were I to make a division of the qualities of bodies as they appear to our senses, I would divide them first into those that are manifest, and those that are occult. The manifest qualities are those which Mr. Locke calls primary; such as Extension, Figure, Divisibility, Motion, Hardness, Softness, Fluidity. The nature of these is manifest even to sense; and the business of the philosopher with regard to them is not to find out their nature, which is well known, but to discover the effects produced by their various combinations; and, with regard to those of them which are not essential to matter, to discover their causes as far as he is able.

"The second class consists of occult qualities, which may be subdivided into various kinds; as first, the secondary qualities; secondly, the disorders we feel in our own bodies; and thirdly, all the qualities which we call powers of bodies, whether mechanical, chemical, medical, animal, or vegetable; or if there be any other powers not comprehended under these heads. Of all these the existence is manifest to sense, but the nature is occult; and here the philosopher has an ample

QUALITY-

field."—Reid, Intell. Pow., essay ii. ch. 18; Sir W. Hamilton, Discussions, p. 611.

QUANTITY (πόσον, quantum, how much) is defined by mathematicians to be "that which admits of more or less."

"Mathematics contain properly the doctrine of measure; and the object of this sciene is commonly said to be quantity; therefore, quantity ought to be defined, what may be measured. Those who have defined quantity to be whatever is capable of more or less, have given too wide a notion of it, which, it is apprehended, has led some persons to apply mathematical reasoning to subjects that do not admit of it. Pain and pleasure admit of various degrees, but who can pretend to measure them?"—Reid, Essay on Quantity.

"According to the common definition, quantity is that which is susceptible of augmentation or diminution. But many things susceptible of augmentation or diminution, and that even in a continuous manner, are not quantities. A sensation, painful or pleasing, augments or diminishes, and runs through different phases of intensity. But there is nothing in common between a sensation and quantity."—Dict. dcs Sciences Philosoph.

"There are some quantities which may be called proper, and others improper. . . . That properly is quantity which is measured by its own kind; or which, of its own nature, is capable of being doubled or tripled, without taking in any quantity of a different kind as a measure of it. Improper quantity is that which cannot be measured by its own kind; but to which we assign a measure by the means of some proper quantity, that is related to it. Thus velocity of motion, when we consider it by itself, cannot be measured." We measure it by the space passed in a given time.—Reid, Essay on Quantity.

Quantity (Discrete and Continuous).—"In magnitude and multitude we behold the two primary, the two grand and comprehensive species, into which the *yenus* of *quantity* is divided; magnitude, from its union, being called *quantity continuous*; multitude, from its separation, *quantity discrete*. Of the *continuous* kind is every solid; also the bound of every solid; that is, a superficies; and the bound of every superficies, that is, a line; to which may be added those two concomitants

QUANTITY-

of every body, namely, time and place. Of the discrete kind are fleets and armies, herds, flocks, the syllables of sounds articulate," &c.—Harris, Phil. Arrange., ch. 9.

"Discrete quantity is that of which the parts have no continuity, as in number. The number, e.g., of inches in a footrule, is the same whether the solid inches remain continuous, or are cut asunder and flung about the world; but they do not constitute a foot length (which is a continuous quantity), unless they are so joined together that the bounding lines of one coincide with those of another. Of continuous quantities there are two kinds,—one, of which the parts are co-existent, as in extension; another, in which the parts are successive, as in duration. Discrete and continuous quantities are sometimes called multitude and magnitude.—Fitzgerald, Notes to Aristotle's Ethies, 8vo, Dublin, 1850, p. 151.—See Aristotle in Categor., ch. 6.

According to Derodon (*Phys.*, pars 1, cap. 5) quantity is either—1. *Permanent*, when its parts are together; or 2. *Successive*, when they exist some after others. Time and motion are quantity successive. *Permanent quantity* is—1. *Continuous*, as a *line* which is length; superficies, which is length and breadth; and mathematical body, which is length, breadth, and depth. 2. *Discrete*, as number and speech.

Hutcheson notices magnitude, time, and number, as three genera of quantity.—Metaphys., part i. cap. 5.

Quantity is called discrete when the parts are not connected, as number; continuous, when they are connected, and then it is either successive, as time, motion; or permanent, which is what is otherwise called space or extension, in length, breadth, and depth; length alone constitutes lines; length and breadth, surfaces; and the three together, solids.—Port Roy. Log., part i. ch. 2.—V. Proposition.

QUANTIFICATION OF THE PREDICATE.—The quantity of a proposition taken as a whole depends upon the *subject* being universal or particular, but it is equally important to consider the quantity of the *predicate*.

In all affirmative propositions the predicate must be regarded as particular, while in all negative propositions it is universal. All that we assert in an affirmative proposition is that the predicate includes the subject. Thus in the proposition:

# QUANTIFICATION OF THE PREDICATE—

All stones are minerals, we only employ the word minerals in so far as it coincides with the word stones; that is only in a part of its extension [all stones are some minerals]. In a negative proposition, we assert that no part of the subject is contained in any part of the predicate. Thus when I say: No stones are metals, I exclude the notion "stones" from the entire extension of the word "metals," and consequently use it in its whole generality.—Morell, Handbook of Logie, p. 25.

The Quantification of the Predicate is much insisted on by Sir W. Hamilton, Leets. on Logic, i.; Baynes, New Ana-

lytic of Logical Forms.

QUIDDITY or QUIDITY (quidditas, from quid, what).—This term was employed in scholastic philosophy as equivalent to the To Ti Ev elvas of Aristotle, and denotes what was subsequently called the substantial form. It is the answer to the question, What is it? quid est? It is that which distinguishes a thing from other things, and makes it what it is, and not another. It is synonymous with essence, and comprehends both the substance and qualities. Quiddity is the being of a thing considered in order to a definition explaining what it is. The being of a thing considered in order to its existence is its essence; in order to its operation its nature.— Mellin. For qualities belong to substance, and by qualities substance manifests itself. It is the known essence of a thing; or the complement of all that makes us conceive of anything as we conceive of it, as different from any or every other thing.

QUIETISM (quies, rest) "is the doctrine that the highest character of virtue consists in the perpetual contemplation and love of supreme excellence."—Summer, Records of Creation, vol.

ii. p. 239.

The two following propositions, from Fenelon's Maxims of the Saints, were condemned by Innocent XII. in 1699:—1. There is attainable in this life a state of perfection in which the expectation of reward, and the fear of punishment have no place. 2. Souls may be so inflamed with love to God, and so resigned to his will, that if they believed that God had condemned them to eternal pain, they would absolutely sacrifice their salvation.

Madame Guyon thought she had learned a method by

# QUIETISM-

which souls might be carried to such a state of perfection that a continual act of contemplation and love might be substituted for all other acts of religion.

A controversy was carried on by Fenelon and Bossuet on the subject. See a dissertation by M. Bonnel, De la Controversé de Bossuet et Fenelon, sur le Quiétisme, 8vo, Macon, 1850; Upham, Life of Madame Guyon.

RACE.—V. SPECIES.

RATIO.—[Proportion,—Latin, a reason]. When two subjects admit of comparison with reference to some quality which they possess in common, and which may be measured, this measure is their ratio, or the rate in which the one exceeds the other. With this term is connected that of proportion, which denotes the portions, or parts of one magnitude which are contained in another. In mathematics, the term ratio is used for proportion; thus, instead of the proportion which one thing bears to another, we say, the ratio which one bears to the other, meaning its comparative magnitude.

RATIOCINATION.—[Reasoning.] "The conjunction of images with affirmations and negations, which make up propositions, and the conjunction of propositions one to another, and illation of conclusions upon them, is ratiocination or discourse.

"The schoolmen make a third act of the mind which they call ratiocination, and we may style it the generation of a judgment from others actually in our understanding."—Tucker, Light of Nature, vol. i. part i. ch. 11, sec. 13.

"When from a general proposition, by combining it with other propositions, we infer a proposition of the same degree of generality with itself, or a less general proposition, or a proposition merely individual, the process is ratiocination (or syllogism)."—Mill, Log., 2d ed. vol. i. p. 223.—V. REASONING.

RATIONALE.—[The rational basis for a system or order of things.]

"There cannot be a body of rules without a rationale, and this rationale constitutes the science. There were poets

# RATIONALE—

before there were rules of poetical composition; but before Aristotle, or Horace, or Boileau, or Pope could write their arts of poetry and criticism, they had considered the reasons on which their precepts rested, they had conceived in their own minds a theory of the art."—Sir G. C. Lewis, *Method of Observ. in Polities*, ch. 19, sec. 2.

RATIONALISM, in philosophy, is opposed to sensualism, sensuism, or sensism, according to which, all our knowledge is derived from sense. It is also opposed to empiricism, which refers all our knowledge to sensation and reflection, or experience. According to rationalism, reason furnishes certain elements, without which experience is not possible. The philosophy of Condillac is of the former kind,—that of Royer Collard of the latter. The philosophy of Locke and Reid have been contrasted in the same manner, but not quite correctly.

RATIONALISM, in religion, as opposed to supernaturalism, means the adoption of reason as our sufficient and only guide, exclusive of tradition and revelation. [More restrictedly, the acceptance of the teaching of Revelation only in so far as reason can explain its doctrine.] Spinoza, in his Tractatus Theologico-Politicus, tried to explain all that is supernatural in religion by reason. And Strauss and others in modern Germany have carried this line of speculation much farther.

REAL (The).—" There is no arguing from ideal to real existence, unless it could first be shown, that such ideas must have their objective realities, and cannot be accounted for, as they pass within, except it be by supposing such and such real existences, ad extra, to answer them."—Waterland, Works, vol. iv. p. 435.

The term real always imports the existent. It is used—

- 1. As denoting the existent, as opposed to the non-existent, something, as opposed to nothing.
- 2. As opposed to the nominal or verbal, the thing to the name.
- 3. As synonymous with actual, and thus opposed—1. To potential, and 2. To possible, existence.
- 4. As denoting the absolute in opposition to the phenomenal, things in themselves in opposition to things as they appear to us, relatively to our faculties.

# REAL—

5. As indicating a subsistence in nature in opposition to a representation in thought, ens reale, as opposed to ens rationis.

6. As opposed to logical or rational, a thing which in itself, or really, re, is one, may logically, ratione, be considered as diverse or plural, and vice versa.—Sir William Hamilton, Reid's Works, note B.

REALISM, as opposed to idealism, is the doctrine that in perception there is an immediate or intuitive cognition of the external object, while according to idealism, our knowledge of an external world is mediate and representative, i.e., by means of ideas.—Sir W. Hamilton, Reid's Works, note C; Edin. Rev., vol. lii. pp. 175-181.

REALISM, as opposed to nominalism, is the doctrine that genus and species are real things, existing independently of our conceptions and expressions; and that as in the case of singular terms, there is some real individual corresponding to each, so, in common terms also, there is something corresponding to each; which is the object of our thoughts, when we employ the term.—Whately, Log., bk. iv. ch. 5, sec. 1.

Cousin has said that the Middle Age is but a development of a phrase of Porphyry (Isagoge, ch. 1), which has been thus translated by Boethius-Mox de generibus et speciebus illud quidem sive subsistant, sive in solis nudis intellectibus posita sint, sive subsistantia corporalia sint an incorporalia, et utrum separata a sensibilibus an in sensibilibus posita et citra hæc consistentia, dicere recusabo.—See Chretien, Log. Meth., ch. 3;

Thomson, Outline of Laws of Thought, part i. sec. 23.

REASON (Ratio, from reor, to think).—[This word is used in a variety of senses. (1.) A general name for the intellectual nature of man. (2.) The faculty of the higher intuitions, or of à priori truth. This is Kant's use of the word, in contrast with Reasoning. (3.) The evidence or rational ground upon which a conclusion rests.—Ed.] It stands for a faculty in man, that faculty whereby man is supposed to be distinguished from beasts,\* and wherein it is evident he much surpasses them."-Locke, Essay on Hum. Understand., bk. iv. ch. 17.

<sup>\*</sup> La Raison, dans sa definition la plus simple, est la faculté de comprendre, qu'il ne faut pas a confondre avec la faculté de connaître. En effet les animaux connaissent, ils ne paraissent pas comprendre, et c'est là qui les distingue de l'homme.-Jouffroy, Droit. Nat., tom. i. p. 38.

"All the operations of the mind when it thinks of the qualities of things separately from the things to which they belong; or when it forms general notions, and employs general terms; or when it judges of the agreement or disagreement of different things; or when it draws inferences; are comprehended under the term reason. Though animals seem to have some little power to perform these operations, man has so much more of it, that he alone is said to be endowed with reason."—Taylor, Elements of Thought.

"This word is used to signify—1. All the intellectual powers collectively. 2. Those intellectual powers exclusively in which man differs from brutes. 3. The faculty of carrying on the operation of reasoning. 4. The premiss or premises of an argument, especially the minor premiss; and it is from reason in this sense that the word reasoning is derived. 5. A cause, as when we say that the reason of an eclipse of the sun is,\* that the moon is interposed between it and the earth."—Whately, Log., App. i.

"Reason is used sometimes to express the whole of those powers which elevate man above the brutes, and constitute his rational nature, more especially, perhaps, his intellectual powers; sometimes to express the power of deduction or argumentation."—Stewart, Outlines, part ii. ch. 1, sec. 6.

Considering it as a word denoting a faculty or complement of faculties, Sir W. Hamilton, Reid's Works, note A, sec. 5,

says, "Reason has been employed to denote-

"1. Our intelligent nature in general, as distinguished from the lower cognitive faculties, as sense, imagination, and memory; and in contrast to the feelings and desires, including—1. Conception; 2. Judgment; 3. Reasoning; 4. Intelligence; vov;

"2. The right and regular use of our rational faculties.

"3. The dianoetic and noetic functions of reason, as by Reid, Intell. Pow., essay vi. ch. 2.

"4. The dianoetic function or ratiocination, as by Reid in his *Inquiry*, Introd. sec. 3, ch. 2, sec. 5 and 7.

<sup>\*</sup> The Idea of the reason is higher than that of cause. The ground or reason of all existence, actual or possible, is the existence of God. Had He not existed, nothing could ever have existed. But God is the cause only of such things as he has created in time; while he is the ground or reason of everything possible.

#### REASON—

"5. The noetic function or common sense. And by Kant and others opposed to the understanding as comprehending the other functions of thought."

REASON (Spontaneity of).—"I call spontaneity of reason, the development of reason anterior to reflection, the power which reason has to seize at first upon truth, to comprehend it and to admit it, without demanding and rendering to itself an account of it."—Cousin, Hist. of Mod. Philos., vol. i. p. 113.

REASON AND UNDERSTANDING.—"Pure reason or intuition holds a similar relation to the understanding that perception holds to sensation. As sensation reveals only subjective facts, while perception involves a direct intuition of the objective world around us; so with regard to higher truths and laws, the understanding furnishes merely the subjective forms, in which they may be logically stated, while intuition brings us face to face with the actual matter, or reality of truth itself."—Morell, Philos. of Relig., p. 19.

"The faculty of thought manifests itself both as understanding and reason. By the understanding we inquire after and investigate the grounds, causes, and conditions of our representations, feelings, and desires, and of those objects standing in immediate connection with them; by reason we inquire after ultimate grounds, causes, and conditions. By the understanding we evolve rules for the regulation of our desiring faculty; by reason, we subordinate these rules to a higher law, to a law which determines the unconditioned form, the highest end of acting. Through the power of thought, therefore, our knowledge, both theoretical and practical, is comprehended in unity, connection, and in being."—Tenneman, Grundriss, sec. 41.

"By the understanding, I mean the faculty of thinking and forming judgments on the notices furnished by the sense, according to certain rules existing in itself, which rules constitute its distinct nature. By the pure reason, I mean the power by which we become possessed of principles (the eternal verities of Plato and Descartes) and of ideas (n.b., not images), as the ideas of a point, a line, a circle, in mathematics; and of justice, holiness, free-will, &c., in morals. Hence in works of pure science, the definitions of necessity

#### REASON—

precede the reasoning; in other works they more aptly form

the eonelusion."—Coleridge, Friend, pp. 150, 151.

"The definition and proper character of man—that, namely, which should contradistinguish him from other animals, is to be taken from his reason rather than his understanding; in regard that in other creatures there may be something of understanding, but there is nothing of reason."—Harrington, quoted in Aids to Reflection, vol. i. p. 162.

In the philosophy of Kant the understanding is distinguished

from the reason—

1. By the sphere of their action. The sphere of the understanding is coincident with the sensible world, and cannot transcend it; but the reason ascends to the super-sensuous.

2. By the objects and results of their exercise. The understanding deals with conceptions, the reason with ideas. The knowledge obtained by the understanding is particular and eontingent, the product of the reason is necessary and universal knowledge or truth.

Crit. of Pure Reason, see English translat., pp. 7, 20, 57, 268, 277; Prolegomena, see. 59. See also Morell, Philos. of Relig., eh. 2; and Philos. Tendencies, p. 71; Coleridge,

Aids to Reflection.

"The assertion of a faculty of the mind by which it apprehends truth, which faculty is higher than the discursive reason, as the truth apprehended by it is higher than mere demonstrative truth, agrees with the doetrine taught and insisted on by the late Samuel Taylor Coleridge. And so far as he was the means of inculcating this doctrine, which is the doetrine of Plato, and I might add, of Aristotle, and of many other philosophers, let him have due honour. But in his desire to impress the doetrine upon men's minds, he combined it with several other tenets, which will not bear examination. He held that the two faculties by which these two kinds of truth are apprehended, and which our philosophical writers eall the intuitive reason, and the discursive reason, may be ealled, and ought to be called respectively, the reason and the understanding; and that the second of these is of the nature of the instinct of animals, so as to be something intermediate between reason and instinct. These opinions, I may venture to say, are altogether erroneous.

The intuitive reason and the discursive reason are not, by any English writers, called the reason and the understanding; and accordingly, Coleridge has had to alter all the passages, viz., those taken from Leighton, Harrington, and Bacon, from which his exposition proceeds. The understanding is so far from being especially the discursive or reasoning faculty, that it is, in universal usage, and by our best writers, opposed to the discursive or reasoning faculty. Thus this is expressly declared by Sir John Davies in his poem 'On the Immortality of the Soul.' He says of the soul:—

'When she rates things, and moves from ground to ground,
The name of reason (ratio) she acquires from this;
But when by reason she the truth hath found,
And standeth fixt, she understanding is.'

"Instead of the reason being fixed, and the understanding discursive, as Mr. Coleridge says, the reason is distinctively discursive; that is, it obtains conclusions by running from one point to another. This is what is meant by discursus; or, taking the full term, discursus rationis, discourse of reason. Understanding is fixed, that is, it dwells upon one view of a subject, and not upon the steps by which that view is obtained. The verb to reason implies the substantive, the reason, though it is not co-extensive with it; for, as I have said, there is the intuitive reason as well as the discursive reason. But it is by the faculty of reason that we are capable of reasoning; though undoubtedly the practice or the pretence of reasoning may be carried so far as to seem at variance with reason in the more familiar sense of the term; as is the case also in French. . . . Moliere's Crisale says (in the Femmes Savantes)—

> 'Ralsonner est l'emploi de toute ma maison Et le raisonnement en bannit la Raison.'

"If Mr. Coleridge's assertion were true that the understanding is the discursive and the reason the fixed faculty, we should be justified in saying that the understanding is the faculty by which we reason, and the reason is the faculty by which we understand. But this is not so. . . . .

"Mr. Coleridge's object in his speculations is nearly the same as Plato's, viz., to declare that there is a truth of a higher kind than can be obtained by mere reasoning; and also to claim, as portions of this higher truth, certain funda-

#### REASON—

mental doctrines of morality. Among these Mr. Coleridge places the authority of conscience, and Plato the supreme good. Mr. Coleridge also holds, as Plato held, that the reason of man in its highest and most comprehensive form, is a portion of a supreme and universal reason; and leads to truth, not in virtue of its special attributes in each person, but by its own nature.

"The view thus given of that higher kind of knowledge which Plato and Aristotle place above ordinary science, as being the knowledge of and faculty of learning first principles, will enable us to explain some expressions which might otherwise be misunderstood. Socrates, in the concluding part of the Sixth Book of the Republic, says, that this kind of knowledge is 'that of which the reason ( $\lambda \acute{o}_{7}$ 05) takes hold,\* in virtue of its power of reasoning.' Here we are plainly not to understand that we arrive at first principles by reasoning; for the very opposite is true, and is here taught, viz., that first principles are not what we reason to, but what we reason from. The meaning of this passage plainly is, that first principles are those of which the reason takes hold in virtue of its power of reasoning; they are the conditions which must exist in order to make any reasoning

possible; they are the propositions which the reason must involve implicitly, in order that we may reason explicitly;

"Plato's views may be thus exhibited :-

they are the intuitive roots of the dialectical power.

	Intelligible World, νοητόν.		Visible World, ὁρατόν.	
Object,	Ideas. Ιδέαι.	Conceptions. διάνοια.	Things. $\zeta \hat{\omega} \alpha, \kappa. \tau. \lambda.$	Images. εlκόνες.
Process,	Intuition. νόησις.	Demonstration. ἐπιστήμη.	Belief. πίστις.	Conjecture. είκασία.
Faculties,.	Intuitive Reason.	Discursive Reason. λόγος.	Sensation. αΐσθησις.	

<sup>\*</sup> τῆ τοῦ διαλέγεσθαι δυνάμει.

From a paper by Dr. Whewell, On the Intellectual Powers according to Plato, in the Cambridge Philos. Trans., 1855. [The perplexity referred to by Whewell may be easily escaped by distinguishing the reasoning power from the reason. The reasoning or discursive process is carried on by the Judgment, Understanding, or Reasoning Power. There is no ambiguity here when, as the result of the reasoning process, we are said to understand the subject. Reason is the faculty perceiving self-evident truth.—Ed.]

Reason (Impersonal).—Reason, according to Cousin and other French philosophers, is the faculty by which we have knowledge of the infinite and the absolute, and is impersonal.

"Licet enim intellectus meus sit individuus et separatus ab intellectu tuo, tamen secundum quod est individuus non habet universale in ipso, et ideo non individuatur id quod est in intellectu. . . . Sic igitur universale ut universale est ubique et semper idem omnino et idem in animabus omnium, non recipiens individuationem ab anima."

These words are quoted from Averrhöes, by Mons. Haureau, in his Examen de la Philos. Scolastique, tom. i. p. 69, who exclaims, "Voila la thèse de l'intelligence ou de la raison impersonelle!" But the truth is, that the root and germ of this doctrine may be found in the doctrine of Plato, that human reason is a ray of the Divine reason.

"He the great Father! kindled at one flame
The world as rational—one spirit pour'd
From spirit's awful fountain, poured Himself
Through all their souls, but not in equal stream:
Profuse or frugal of the inspiring God,
As His wise plan demanded; and when past
Their various trials in their common spheres
(If they continue rational as made)
Resorbs them all into himself again,
His throne their centre, and His smile their crown."—Young.

"In truth," observes Fenelon, "my reason is in myself, for it is necessary that I should continually turn inward upon myself in order to find it; but the higher reason which corrects me when I need it, and which I consult, is not my own, it does not specially make a part of myself. Thus, that which may seem most our own, and to be the foundation of our being, I mean our reason, is that which we are to believe most borrowed. We receive at every moment a reason

superior to our own, just as we breathe an air which is not ourselves. There is an internal school, where man receives what he can neither acquire outwardly for himself, nor learn of other men who live by alms like himself."—Existence of God, ch. iv. sec. 3.

"While we reflect on our idea of reason, we know that our souls are not it, but only partake of it; and that we have it κατὰ μέθεξιν, and not κατ' ὁν οὐσίην. Neither can it be called a faculty, but rather a light, which we enjoy, but the source of which is not in ourselves, nor rightly by any individual to be denominated mine."—John Smith, Posthumous Tracts, 1660. See Coleridge, Liter, Rem., vol. iii. p. 464.

"Reason is impersonal in its nature," says Cousin (Expos. of Eclecticism, translated by Ripley, p. 69), "it is not we who make it. It is so far from being individual, that its peculiar characteristics are the opposite of individuality, viz. universality and necessity; since it is to reason that we owe the knowledge of universal and necessary truths, of principles which we all obey and cannot but obey." . . . . "It descends from God and approaches man; it makes its appearance in the consciousness as a guest who brings intelligence of an unknown world, of which it at once presents the idea and awakens the want. If reason were personal it would have no value, no authority beyond the limits of the individual subject. . . . . Reason is a revelation, a necessary and universal revelation which is wanting to no man, and which cnlightens every man on his coming into the world. Reason is the necessary mediator between God and man, the xóxos of Pythagoras and Plato, the Word made flesh, which serves as the interpreter of God, and the teacher of man, divine and human at the same time. It is not, indeed, the absolute God in his majestic individuality, but his manifestation in spirit and in truth; it is not the Being of beings, but it is the revealed God of the human race."—Ibid, p. 79.

"Reason or intelligence is not individual, is not ours, is not even human; it is absolute, it is divine. What is personal to us is our free and voluntary activity; what is not free and not voluntary is adventitious to man, and does not constitute an integrant part of his individuality. Intelligence is conversant with truth; truth as necessary and

universal is not the creature of my volition; and reason, which, as the subject of truth, is also universal and necessary, is consequently impersonal. We see, therefore, by a light which is not ours; and reason is a revelation of God in man. The ideas of which we are conscious belong not to us, but to absolute intelligence."—Sir Will. Hamilton, Discussions, &c., 8vo, Lond. 1852, p. 8, giving the views of Consin.

This doctrine of the impersonal reason is regarded by Bouillier (Theorie de la Raisson impersonelle, 8vo, Paris, 1846) and others as the true ground of all certainty. Admit the personality of reason and man becomes the measure of all things—truth is individual. But the truths of reason are universal. No one, says Malebranche, can feel the pain which I feel; but any one or every one can contemplate the truth which I know. The scepticism of Kant, as to the relative nature of our knowledge, is thus demolished.

REASON (Determining or Sufficient).—"There are two great principles of reasoning: the one is the principle of contradiction, which means that of two contradictory propositions, the one is true, the other is false: the other is the principle of raison determinante, which is that nothing happens without a cause, or at least a reason determining, that is, something which may serve to render a reason à priori, why that thing is as it is, rather than otherwise."—Leibnitz, Theodicée, partie 1, sec. 44.

Nothing is done without a sufficient reason, that is, nothing happens without its being possible to him who knew things sufficiently to render a reason which is sufficient to determine why it is so, and not otherwise."—Leibnitz, Principes de la Nat. et de la Grace, sec. 7.—V. SUFFICIENT REASON.

REASONING, "in one of its acceptations, means syllogizing, or the mode of inference which may be called concluding from generals to particulars. In another of its senses, to reason is simply to infer any assertion, from assertions already admitted: and in this sense induction is as much entitled to be called reasoning as the demonstrations of geometry. Writers on Logic have generally preferred the former acceptation of the term; the latter and more extensive signification is that in which I mean to use it."—Mill, Log., 2d ed. vol. i. p. 3.

# REASONING-

"Reasoning is that operation of the mind through which it forms one judgment from many others; as when, for instance, having judged that true virtue ought to be referred to God, and that the virtue of the heathens was not referred to him, we thence conclude that the virtue of the heathens was not true virtue."—Port Roy. Log.

"Some appear to include under the title of reasoning every case in which a person believes one thing in consequence of his believing another thing, however far he may be from having any grounds to warrant the inference; and they accordingly include those processes which take place in the minds of infants and of brutes; which are apt to associate with the appearance of an object before them the remembered impression of something that formerly accompanied it. Such a process is attended to in the familiar proverbs that 'a burnt child dreads the fire;' or as it is expressed in another form, 'the scalded cat fears cold water;' or again in the Hebrew proverb, 'he who has been bitten by a serpent is afraid of a rope.' Most logical writers, however, have confined the name of reasoning to valid argument; which cannot exist without a universal premiss, implied, if not expressed."—Whately, Log., Introd. 4.

Mr. Stewart says that to adapt means to a proximate end

is to reason.

# RECOLLECTION.—V. REMEMBRANCE.

RECTITUDE.—[Rightness,—the quality of an action as in accordance with moral law.—Ed.] "Rectitude of conduct is intended to express the term κατόςθωσις, which Cicero translates recta effectio: κατόςθωμα he translates rectum factum, De Fin., lib. iii. cap. 4. Now the definition of κατόςθωμα was νόμου πρόσταγμα, 'A thing commanded by law' (that is, by the law of nature, the universal law). Antoninus, speaking of the reasoning faculty, how, without looking farther, it rests contented in its own energies, adds, 'for which reason are all actions of this species called rectitudes (κατοςθώσεις, κατά ὀςθός, right onwards), as denoting the directness of their progression right onwards."—Harris, Dialogue on Happiness, p. 73, note.

"Goodness in actions is like unto straightness; wherefore that which is done well we term right, for as the straight way is most acceptable to him that travelleth, because by it he

# RECTITUDE—

cometh soonest to his journey's end: so in action, that which doth lie the evenest between us and the end we desire, must needs be the fittest for our use."—Hooker, *Eccles. Pol.*, bk. i. sec. 8.

If a term is to be selected to denote that in action and in disposition of which the Moral Faculty approves, perhaps the most precise and appropriate is rectitude or rightness. Dr. Adams has remarked (Sermon on the Nature and Obligation of Virtue), "The man who acts virtuously is said to act rightly. This appears more proper than to say that he acts according to truth; and more clear and distinct than to say that he acts according to the nature and reason of things; the meaning of which will, in all cases, be found to be only this-that he acts according to what reason, in the present circumstances of the agent, and the relation he stands in to the objects before him, pronounces to be right." In like manner Dr. Reid has said (Act. Pow., essay v. ch. 5), "Prudence is a virtue, benevolence is a virtue; but the essence and formal nature of virtue must lie in something that is common to all these, and to every other virtue. And this, I conceive, can be nothing else but the rectitude of such conduct and turpitude of the contrary, which is discerned by a good man. And so far only he is virtuous as he pursues the former and avoids the latter." Rectitude, then, is that in action and in disposition of which the moral faculty approves. The contrary of what is right is wrong. Rightness and wrongness, then, are the characteristics of action and disposition, as contemplated by the moralist. So that the foundation of morals, the ground upon which moral distinctions are taken, is in the essential difference between what is right and what is wrong.

"There are other phrases which have been used, which I see no reason for adopting, such as acting contrary to the relations of things—contrary to the reason of things—to the fitness of things—to the truth of things—to absolute fitness. These phrases have not the authority of common use, which, in matters of language, is great. They seem to have been invented by some authors with a view to explain the nature of vice; but I do not think they answer that end. If intended as definitions of vice, they are improper; because, in the most favourable sense they can bear, they extend to every

#### RECTITUDE—

kind of foolish and absurd eonduct, as well as to that which is vicious."—Reid, Act. Pow., essay v. ch. 7.

But what is rectitude or rightness as the characteristic of an action? According to Price and others, this term denotes a simple and primitive idea, and cannot be explained. It might as well be asked, what is truth, as the characteristic of a proposition? It is a capacity of our rational nature to see and acknowledge truth; but we cannot define what truth is. We call it the conformity of our thoughts with the reality of things. But it may be doubted how far this explanation makes the nature of truth more intelligible. In like manner, some explain rectitude by saying that it consists in a congruity between an action and the relations of the agent. It is the idea we form of an action, when it is, in every way, conformable to the relations of the agent and the circumstances in which he is placed. On contemplating such an action, we approve of it, and feel that if we were placed in such circumstances, and in such relations, we should be under an obligation to perform it. Now, the circumstances and relations in which man is placed arise from his nature and from the nature of things in general; and hence it is has been said, that rectitude is founded in the nature and fitness of things; that is, an action is right when it is fit or suitable to all the relations and circumstances of the agent; and of this fitness conscience or reason is the judge. Conscience or reason does not constitute the relations; these must arise from the nature of man and the nature of things; but conscience or reason judges and determines as to the conformity of actions to these relations; and these relations arising necessarily from the very nature of things, the conformity with them, which constitutes rectitute, is said to be eternal and immutable.

REDINTEGRATION (re-integro) [Reconstruction] is used by Lord Bacon in his Letter to Sir Geo. Villiers, as synonymous with resuscitation. As used by Sir W. Hamilton it denotes the fact that the parts of any total thought, when subsequently called into consciousness, are apt to suggest immediately, the parts to which they were proximately related, and mediately, the whole of which they were constituent.

—Hamilton's Reid.

REDUCTION IN LOGIC.—The first figure of syllogism is called

# REDUCTION-

perfect; because—1. It proceeds directly on the Dictum, and. 2. It arranges the terms in the most natural order. All arguments may be, in one way or other, brought into some one of the four moods in the first figure: and a syllogism is, in that case, said to be reduced (i.c., to the first figure). These four are called the perfect moods, and all the rest imperfect. The mood to be reduced is called the reducend. and that to which it is reduced the reduct. Reduction is of two kinds,-1. Direct or ostensive, which consists in bringing the premisses of the reducend to a corresponding mood in the first figure, by transposition or conversion of the premisses, and from the premisses thus changed deducing either the original conclusion, or one from which it follows by conversion. 2. Indirect, or reductio per impossible or ad absurdum, by which we prove (in the first figure) not, directly, that the original conclusion is true, but that it cannot be false; i.e., that an absurdity would follow from the supposition of its being false.—Whately, Log., bk. ii. ch. 3, sec. 5, 6.

REFLECTION (re-flecto, to bend back).—[Attention directed upon the facts of personal experience. In a wider sense, thought or the reasoning process, whatever the object on which it is directed.] "By reflection I would be understood to mean that notice which the mind takes of its own operations, and the manner of them; by reason whereof there come to be ideas of these operations in the understanding. Those two, viz., external material things, as the objects of sensation; and the operations of our own minds within, as the objects of reflection, are to me the only originals from whence all our ideas take their beginnings."—Locke, Essay on Hum. Understand., bk. ii. ch. 1.

"When we make our own thoughts and passions, and the various operations of our minds, the objects of our attention, either while they are present, or when they are recent and fresh in our memory, this act of the mind is called reflection."—Reid, Intell. Pow., essay i. ch. 2; also ch. 5, and essay vi.

He gives a more extensive (but less proper) signification to reflection.—Intell. Pow., essay iii. ch. 5; also essay vi. ch. 1. Reflection is purely a mental operation. It is not a simple

# REFLECTION-

act. In reflection we may analyze and compound, abstract and generalize. These operations of mind so arranged as to gain some end, constitute a method. And a method is just the act of reflecting or properly employing the energies of the mind on the objects of its knowledge.

"Reflection creates nothing—can create nothing; every thing exists previous to reflection in the consciousness, but everything pre-exists there in confusion and obscurity; it is the work of reflection in adding itself to consciousness, to illuminate that which was obscure, to develop that which was enveloped. Reflection is for consciousness what the microscope and the telescope are for the natural sight: neither of these instruments makes or changes the objects; but in examining them on every side, in penetrating to their centre, these instruments illuminate them, and discover to us their characters and their laws."—Cousin, Hist. of Mod. Phil., vol. i. p. 275.

REFLEX ACTION.—[Muscular activity which is the direct result of an impression made upon the sensitive organism. Action of the motor nerves consequent upon a sudden impression upon the nerves of sensation, as in the sudden start on the infliction of pain. Reflex Action stands in contrast with Voluntary Action.—Ed.]

REFLEX SENSE.—[Hutcheson's name for a mental power, analogous to the senses, by which we have a perception of truth concerning relations. Its exercise is an act of perception, but it depends upon the understanding for its materials. He regards conscience as a Reflex Sense.—Ed.]

REGULATIVE (German, Regulativ).—[Kant's designation for forms of knowledge which are conditions for the ingathering of knowledge, without affording in themselves a test of objective truth. Regulative stands in contrast with Constitutive. Thus, according to Kant, Space and Time are only mental forms regulative of the mind in its use of the sensory.—Ed.]

RELATION (re-fero, relatum, to bear back).—"When the mind so considers one thing that it does as it were bring it to and set it by another, and carries its view from one to the other, this is, as the words import, relation and respect; and the denominations given to positive things, intimating that respect, and serving as marks to lead the thoughts beyond the subject itself denominated to something distinct from it, are what we

# RELATION-

call relatives; and the things so brought together, related."—Locke, Essay on Hum. Understand., bk. ii. ch. 25.

"Any sort of connection which is perceived or imagined between two or more things; or any comparison which is made by the mind, is a relation. When we look at these two lines \_\_\_\_\_ we do not merely think of them separately, as this straight line, and that straight line; but they are immediately connected together by a comparison which takes place in the mind as soon as they meet the eye. We perceive that these two lines are alike; they are both straight; and we call the notion that is formed by the comparison, the relation of sameness. We may then think of them as the same in length; this comparison gives us the notion which we call the relation of equality. We think of them again as equally distant from each other, from end to end, and then we say they are parallel lines; this word parallel represents nothing existing in the lines themselves, but only the notion formed by measuring the distance between them. All these notions spring up in the mind from the comparison of the two objects; they belong entirely to the mind, and do not exist in the things themselves."— Taylor, Elements of Thought.

"Another way," says Dr. Reid (Intell. Pow., essay vi. ch. 2), "in which we get the notion of relations (which seems not to have occurred to Mr. Locke), is when, by attention to one of the related objects, we perceive or judge that it must, from its nature, have a certain relation to something else, which before, perhaps, we never thought of; and thus our attention to one of the related objects produces the notion of a correlate, and of a certain relation between them. Thus, when I attend to colour, figure, weight, I cannot help judging these to be qualities which cannot exist without a substance; that is, something which is coloured, figured, heavy. If I had not perceived such things to be qualities, I should never have had any notion of their subject, or of their relation to it. By attending to the operations of thinking. memory, reasoning, we perceive or judge that there must be something which thinks, remembers, and reasons, which we call the mind. When we attend to any change that happens in nature, judgment informs us that there must be a cause of

#### RELATION-

this change which had power to produce it; and thus we get the notions of cause and effect, and of the relation between them. When we attend to body, we perceive that it cannot exist without space; hence we get the notion of space (which is neither an object of sense nor of consciousness), and of the relation which bodies have to a certain portion of unlimited space, as their place."—See also Reid, Inquiry, ch. 1, sec. 7. Buffier calls relation, in this view, Occasio quam præbet objectum cogitandi de alio.

Although relations are not real entities, but merely mental modes of viewing things, let it be observed that our ideas of relation are not vague nor arbitrary, but are determined by the known qualities of the related objects. We cannot at will see relations for which there is no foundation in the nature of the related objects. Of all relations, the relations of number are the clearest and most accurately appreciated.

RELATIVE is opposed to absolute—q. v.

RELATIVITY OF HUMAN KNOWLEDGE.—[The doctrine that the nature and extent of our knowledge is determined by the nature, range, and conditions of our cognitive powers. In knowing, we know not the thing itself, but the thing as related to our faculties and capacities. Carried beyond this, the doctrine leads to sceptical results .- Ed. ] That our knowledge of things is relative or proportioned to our faculties must be admitted. Omne quod eognoscitur non secundum sui vim eognoseitur sed secundum eognoseentium potius comprehendata facultatem.—Boethius. We only know things in so far as our faculties are capable of apprehending them. That external objects have more qualities than our senses make known-and that with more senses we might have known more qualities if there be more to know, must be admitted; but this does not invalidate the knowledge which we have. So long as we are men our knowledge must be according to the measure of a man. But this is not the doctrine of the Relativity of our knowledge among philosophers. According to some (as Berkeley or Hume) we know nothing of things but the sensations or feelings which they give us. Of the things in themselves we know nothing, and there is no evidence of there being any thing corresponding to what we call substance. Others think there is in knowledge a phenomenon

# RELATIVITY of HUMAN KNOWLEDGE-

and a noumenon-a knowledge of things as they appear to us, and a knowledge of things in themselves. This second form of the doctrine is held under various modifications. According to Kant and others, the mind invests external objects with certain forms which modify our knowledge. External things exist and have a nature; but we know them only as they appear to us-relative to our faculties of apprehending them, Quiquid recipitur, recipitur in modum recipiendum. "To assert that a representation is untrue, because it is relative to the mind of the receiver, is to overlook the fact that truth itself is nothing more than a relation. Truth and falsehood are not properties of things in themselves but of our conceptions, and are tested not by the comparison of conceptions with things in themselves, but with things as they are given in some other relation. My conception of an object of sense is true when it corresponds to the characteristics of the object as I perceive it; but the perception itself is equally a relation, and equally implies the co-operation of human faculties. Truth in relation to no intelligence is a contradiction in terms: our highest conception of absolute truth is that of truth in relation to all intelligences. But of the consciousness of intelligences different from our own we have no knowledge, and can make no application. Truth, therefore, in relation to man, admits of no other test than the harmonious consent of all human faculties; and, as no such faculty can take cognizance of the absolute, it follows that correspondence with the absolute can never be required as a test of truth. The utmost deficiency that can be charged against human faculties amounts only to this: that we cannot say that we know God as God knows Himself; that the truths of which our finite minds are susceptible may, for aught we know, be but the passing shadow of some higher reality, which exists only in the Infinite Intelligence."—Mansel, Limits of Religious Thought, p. 149.

"Everything which man sees, either with the eye of the body or with the eye of the mind, is in some degree an appearance, different from the reality: God alone sees the perfect reality of things—God alone knows or can know absolute truth."—Hiller, On Goodness, Wisdom, and Power of God, p. 258, 12mo, Lond. 1858.

RELIGION (relego, religo) .- [Homage to the Deity in all the forms which pertain to the spiritual life, in contrast with Theology, the theory of the Divine nature and government. -ED.] This word, according to Cicero (De Nat. Deorum. ii. 28), is derived from, or rather compounded of, re and leuere, to read over again, to reflect upon or to study the sacred books in which religion is delivered. According to Lactantius (Div. Instit., 4), it comes from re-ligare, to bind back-because religion is that which furnishes the true ground of obligation. St. Augustine (De Vera Relig., c. 55) gives the same derivation of the word. But he gives another origin of it (De Civit. Dei, lib. x. cap. 3), where he says, "Deum, qui fons est nostræ beatitudinis, et omnis desiderii nostri finis. eligentes, immo potius religentes, amiseramus enim negligentes; hune, inquam religentes, unde et religio dieta est, ad eum dilectione tendamus, ut perveniendo quiescamus."

"As it is natural for man to review the train of his past actions, it is not incredible that the word *religion* is derived from *relegere*; and that its primary reference is to that activity of conscience which leads us to review the past actions of our

lives."—Gellius, Noct. Attic., No. 9.

"Relligio, according to its primary signification, is perpetually thoughtful, save in regard to some object affecting the conscience."—Donaldson, Varronianus, p. 407, 2d cd. Müller, Professor of Theology at Bale, published a Dissertation on this word in 1834.

Religion is distinguished into natural and revealed, or that knowledge of God and of our duty which is derived from the light of nature or reason—and that knowledge of God and of our duty which comes to us from positive revelation.

In all forms of *religion* there is one part, which may be called the doctrine or dogma, which is to be received by faith; and the *cultus*, or worship, which is the outward expression or mode of manifesting the religious sentiment.

REMEMBRANCE, REMINISCENCE, RECOLLECTION (reeolligo, to gather together again; or reminiscor, to remember)
[recalling of past experiences, whether voluntarily or involuntarily].—"The perception which actually accompanies, and is
annexed to any impression on the body, made by an external
object, furnishes the mind with a distinct idea, which we call
sensation; which is, as it were, the actual entrance of any

## REMEMBRANCE-

idea into the understanding by the senses. The same idea, when it again recurs without the operation of the like object, on the external sensory, is remembrance; if it be sought after by the mind, and with pain and endeavour found and brought again into view, it is recollection; if it be held there long under attentive consideration, it is contemplation."—Locke, Essay on Hum. Understand., bk. ii. ch. 19.

"In other cases, the various particulars which compose our stock of knowledge are *recalled* in consequence of an effort of our will. This latter operation, too, is often called by the same name (memory), but is more properly distinguished by the word *recollection*."—Stewart, *Elements*, ch. 6, sec. 1.

Reminiscence is the act of recovering, and recollection the act of combining remembrances. Those eminences to which we attach the subordinate parts of an object come first into reminiscence; when the intervening portions present themselves in order, the recollection is complete."—Taylor, Syno-

nyms.

REMINISCENCE.—Memory is knowledge of some former consciousness. Reminiscence is the act by which we endeavour to recall and reunite former states of consciousness. It is a kind of reasoning by which we ascend from a present consciousness to a former, and from that to a more remote, till the whole facts of some case are brought again back to us. It is peculiar to man, while memory, as spontaneous, is shared by the brutes. "When we have a reminiscence," said Aristotle (De Mem. et Reminiscentia, ch. 2), "we reason to the effect that we formerly experienced some impression of such or such a kind, so that in having a reminiscence we syllogize."

"There is yet another kind of discussion, beginning with the appetite to recover something lost, proceeding from the present backward, from thought of the place where we miss at, to the thought of the place from whence we came last; and from the thought of that to the thought of a place before, till we have in our mind some place, wherein we had the thing we miss: and this is called *reminiscence*."—Hobbes, *Hum*.

Nat., ch. 4.

REMINISCENCE according to Plato.—[See Plato's Meno. and Phædo.]

"Plato imagined, after more ancient philosophers, that

# REMINISCENCE-

every man is born with a certain reminiscence, and that when we seem to be taught we are only put in mind of what we knew in a former state."—Bolingbroke, essay ii. Presumption of Philosophers.

The term employed by Plato was ἀνάμνησις, which may be translated "knowing up." He did not apply it to every kind or degree of knowledge, but to that spontaneous movement of the mind by which it ascended from mere opinion  $(\delta \delta \xi \alpha)$  to seience (ἐπιστήμη). On such oecasions the appearances of truth and beauty suggested or evolved the ideas of the true and the beautiful; which seemed to belong to the soul and to have been formerly known. There was a stirring up or ealling into act what was in the soul potentially. That they had been known in that former state of existence which Plato, in a myth, represented the soul to have enjoyed, and were now merely recalled or remembered, is the view commonly given (Cicero, Tuscal., i. 24). But what Plato meant more speeially to intimate by the use of this word was, that all seience or eertainty is intuitive, and belongs to the reason, which gives knowledge in the last and highest degree. Conjecture (είκασία), belief (πίστις), which, when conjoined, give opinion (δόξα), and reasoning (διάνοια), which are the other degrees of knowledge, according to Plato, being unable to give ground for seience or certainty."—Heusde, Init. Philosoph. Platon., 8vo, 1827, tom. i. pp. 33, 34.

Olympiodorus, in a Commentary on the *Phædo* of Plato, quoted by Harris (*Hermes*, p. 232), says—"Inasmueh as the soul, by eontaining the principles of all beings, is a sort of omniform representation or exemplar; when it is roused by objects of sense it recollects those principles which it contains within, and brings them forth."

Plato, it is believed, proposed his theory of reminiscence as a sort of allegory, signifying the power which the mind has to draw from itself, on oceasion of perceptions, universal ideas, and the manner in which it rises to them resembling the manner in which is awakened all at onee within us the remembrance of what we have dreamed."—Manuel de Philosophie, 8vo, Paris, 1846, p. 139.

It was in the same sense that Socrates called himself a midwife of the mind. He assisted in bringing to the birth

## REMINISCENCE—

truths with which the mind was big and in labour. He unfolded what was infolded.

Boethius, De Consol., says, the mind by teaching is only excited to know. And Aquinas, De Magistro, says, "Omnis disciplina fit ex pre-existenti eognitione. . . . . Ex homine docente eertitudinem seientiæ non aeciperemus, nisi inesset nobis certitudo principiorum."

According to Mons. Chastel (Les Rationalistes et les Traditionalistes, 12mo, Paris, 1850, p. 150), Thomas Aquinas in his treatise, De Magistro, maintains the following points:—

- 1. To the acquisition of science you must admit as preexistent in us the knowledge of general principles, evident of themselves, and all those notions which the mind frames immediately to itself by the aid of the first sensations; for all teaching supposes, in him who learns, some anterior knowledge.
- 2. But these first truths, conditions pre-requisite for all teaching, these general principles, these principles which are native and not taught, are known to us by that light of reason which God hath put in us, as the image of that uncreated truth which is reflected in our mind. They are given to us by nature as the germ of all the cognitions to which we ultimately attain.

There are certain notions of which it is impossible for a man to be ignorant.

- 3. It is from these principles, known in advance, that he who teaches should set out with us, to teach us other truths connected with these. His teaching consists in showing us this connection. Properly speaking, it is the knowledge of these principles and not teaching which gives us secondary knowledge, although teaching is the mediate cause. It would be impossible for us to learn of a man the knowledge which he wishes to teach us, if there were not in us beforehand those principles to which he connects his knowledge; and all the certainty of that knowledge comes to us from the certainty of those principles, and ultimately from God who has given us the light of reason to know them.
- 4. Thus the knowledge of first principles is not from teaching, although teaching may give secondary truths connected with them.

## REMINISCENCE-

5. But these secondary truths we receive or reject according to their conformity with the truth that is in us.

6. Of these secondary truths which teaching gives, there are many which the mind may discover by its own force, as

there are many diseases which cure themselves.

Augustine also has a treatise, De Magistro, in which, from a different point of view, he comes to conclusions substantially the same. "The certainty of science comes to us from God who has given to us the light of reason. For it is by this light that we know principles, and it is from principles that we derive the certainty of science. And yet it is true, in a certain sense, that man produces in us knowledge. The pupil, if interrogated before teaching, could answer as to those principles by aid of which all teaching proceeds; but he could not answer upon those things which are taught, which are the consequences of those principles. So that he does not learn principles, but only the consequences of them.

D'Alembert, as quoted by Mr. Stewart (vol. ii. p. 23), says, "It should seem that everything we learn from a good metaphysical book is only a sort of reminiscence of what the mind

previously knew.

Sir Walter Scott and others have alluded to a mental affection which they designate the sense of pre-existence. When the mind is in this state the scenes and events which are present and passing appear to have formerly been objects of consciousness. See quotations and references on this curious phenomenon in *Notes and Queries*, 17th January, 1857, p. 50.

On the Reminiscence of Plato, see Piccolomineus, Philosoph.

De Moribus, Francof. 1583, p. 450.

REPRESENTATIVE.—V. KNOWLEDGE.

RESENTMENT.—[Antagonism of feeling directed against a person on account of some act done by him in violation of our own rights or the rights of others.—Ed.]

RETENTION (retineo, to keep hold of).—[The conservative power in our nature, by which we keep in possession knowledge

received.—Ed.]

"The power of reproduction (into consciousness) supposes a power of retention (out of consciousness). To this conser-

### RETENTION-

vative power I confine exclusively the term Memory."—Sir

Will. Hamilton, Reid's Works, p. 912.

"There seems good reason for confining the appellation of memory to the simple power of retention, which undoubtedly must be considered as an original aptitude of mind, irresolvable into any other. The power of recalling the preserved impressions seems on the other hand rightly held to be only a modified exercise of the suggestive or reproductive faculty." —Dr. Tulloch, Theism, p. 206.

RIGHT.—[adi, describes the quality of an action as in conformity with moral law: subst. the claim of a person upon others consequent upon the equal subjection of all to moral law.— Ed.] "Right and duty are things very different, and have even a kind of opposition; yet they are so related that the one cannot even be conceived without the other; and he that understands the one must understand the other. They have the same relation which credit has to debt. As all credit supposes an equivalent debt, so all right supposes a corresponding duty. There can be no credit in one party without an equivalent debt in another party; and there can be no right in one party, without a corresponding duty in another party. The sum of credit shows the sum of debt; and the sum of men's rights shows, in like manner, the sum of their duty to one another.

"The word right has a very different meaning, according as it is applied to actions or to persons. A right action (rectum) is an action agreeable to our duty. But when we speak of the rights of men (ius), the word has a very different. and a more artificial meaning. It is a term of art in law, and signifies all that a man may lawfully do, all that he may lawfully possess and use, and all that he may lawfully claim of any other person.

"We can be at no loss to perceive the duties corresponding to the several kinds of rights. What I have a right to do, it is the duty of all men not to hinder me from doing. What is my property or real right, no man ought to take from me: or to molest me in the use and enjoyment of it. And what I have a right to demand of any man, it is his duty to perform. Between the right on the one hand, and the duty on the other, there is not only a necessary connection, but, in reality,

#### RIGHT—

they are only different expressions of the same meaning, just as it is the same thing to say, I am your debtor, and to say, you are my creditor; or as it is the same thing to say, I am your father, and to say, you are my son."

"As there is a strict notion of justice, in which it is distinguished from humanity and charity, so there is a more extensive signification of it, in which it includes those virtues. The ancient moralists, both Greek and Roman, under the cardinal virtue of Justice, included Beneficence; and in this extensive sense, it is often used in common language. The like may be said of right, which in a sense not uncommon, is extended to every proper claim of humanity and charity, as well as to the claims of strict justice. But, as it is proper to distinguish these two kinds of claims by different names, writers in natural jurisprindence have given the name of perfect rights to the claims of strict justice, and that of imperfect rights to the claims of charity and humanity. Thus all the duties of humanity have imperfect rights corresponding to them, as those of strict justice have perfect rights."—Reid, Act. Pow., essay v. ch. 3.

"The adjective right has a much wider signification than the substantive right. Everything is right which is conformable to the supreme rule of human action; but that only is a right which, being conformable to the supreme rule, is realized in society and vested in a particular person. Hence the two words may often be properly opposed. We may say that a poor man has no right to relief, but it is right he should have it. A rich man has a right to destroy the harvest of his fields, but to do so would not be right.

"To a right, on one side, corresponds an obligation on the other. If a man has a right to my horse, I have an obligation to let him have it. If a man has a right to the fruit of a certain tree, all other persons are under an obligation to abstain from appropriating it. Men are obliged to respect each other's rights.

"My obligation is to give another man his right; my duty is to do what is right. Hence duty is a wider term than obligation; just as right, the adjective, is wider than right the substantive.

"Duty has no correlative, as obligation has the correlative

#### RIGHT—

right. What it is our duty to do, we must do, because it is right, not because any one can demand it of us. We may, however, speak of those who are particularly benefited by the discharge of our duties, as having a moral claim upon us. A distressed man has a moral claim to be relieved, in cases in which it is our duty to relieve him.

"The distinctions just explained are sometimes expressed by using the terms perfect obligation and imperfect obligation for obligation and duty respectively; and the terms perfect right and imperfect right for right and moral claim respectively. But these phrases have the inconvenience of making it seem as if our duties arose from the rights of others; and as if duties were only legal obligations, with an inferior degree of binding force."—Whewell, Elements of Morality, bk. i. sec. 84-89.

ROMANTIC.—"The real and proper use of the word romantic is simply to characterize an improbable or unaccustomed degree of beauty, sublimity, or virtue. For instance, in matters of history, is not the Retreat of the Ten Thousand romantic? Is not the death of Leonidas? of the Horatii? On the other hand, you find nothing romantic, though much that is monstrous, in the excesses of Tiberius or Commodus. So again, the battle of Agincourt is romantic, and of Bannockburn, simply because there was an extraordinary display of human virtue in both these battles. . . . . So then this feeling, this secret and poetical enthusiasm in all your hearts, which as practical men, you try to restrain,-is indeed one of the holiest parts of your being. It is the instinctive delight in. and admiration for, sublimity, beauty, and virtue, unusually manifested."—Ruskin, On Sculpture, lect. 2.

ROSICRUCIANS, a name assumed by a sect of Hermetical philosophers, who came into notice in Germany towards the close of the fourteenth century. Christian Rosenkreuz, from whom, according to some, the name is derived, was born in 1378, travelled to the East, and after keeping company with magicians and cabalists, returned to Germany with their secrets, which he communicated to three of his friends, or sons, and shutting himself up in a cave, died at the age of 106 in 1484. The secrets of the fraternity of the Rosy Cross, which gradually increased in numbers, had reference to four

### ROSICRUCIANS—

points—the transmutation of metals, the prolongation of life, the knowledge of what is passing in distant places, and the application of the Cabala and the science of numbers to discover the most hidden things. They assumed the signature F.R.C., or Fratres Roris Coeti, it being pretended that the matter of the philosopher's stone was dew concocted. Or, according to Mosheim, the name is compounded of Ros, dew; and erux, the cross. In the language of alchemy, the figure of the cross signifies light, and dew was reckoned the most powerful dissolvent of gold; so that a Rosierucian meant one who, by the assistance of dew, sought for light or the philosopher's stone.—Mosheim, Eecles. Hist., vol. iv.; Louis Figuier, L'Alchimie et Les Alehimistes, Par. 1856. Robert Fludd wrote Apologia compendiaria, fraternitatem de Rosea Cruce suspicionis et infamiæ maculis aspersam abluens, 8vo, Leyd. 1616. Tractatus Apologeticus integritatem Societatis de Rosca Cruce defendens, 8vo, Leyd 1617; and under the anagram of Rudolphus Otreb-Tractatus theologo-philosophicus de vita, morte, et resurrectione, fratribus Rosea Crucis dicatus, 4to, Oppenheim, 1617.

RULE.—"Rectitude is a law, as well as a rule to us; it not only directs, but binds all, as far as it is perceived."—Price, Rev. of

Morals, ch. 6.

A rule prescribes means to attain some end. But the end may not be one which all men are to aim at; and the rule may not be followed by all. A law enjoins something to be done, and is binding upon all to whom it is made known.

"A rule, in its proper signification, is an instrument, by means of which we draw the shortest line from one point to another, which for this very reason is called a straight line.

"In a figurative and moral sense, a *rule* imports nothing else but a principle or maxim, which furnishes man with a sure and concise method of attaining to the end he proposes."—Burlamaqui, *Principles of Nat. Law*, part i. ch. 5.

SABAISM (from 825, signifying a host, or from tsaba, in Syraic, to adore; or from Saba the son of Cush, and grandson of

#### SABAISM—

Seth) means the worship of the stars, or host of heaven, which prevailed from an early period in the East, especially in Syria, Arabia, Chaldea, and Persia. The Sabæans are not mentioned by the Greek or Roman writers, and by the Arabian authors they are called Nabatheans, as if descendants from Nebaioth, son of Ishmael. Their doctrines are expounded by Moses Maimonides in the third part of his work, De More Nevochim. There was a popular and a philosophic creed with them. According to the former the stars were worshipped; and the sun, as supreme God, ruled over heaven and earth, and the other heavenly bodies were but the ministers of his will. According to the philosophic creed, the stars consisted of matter and mind. God is not the matter of the universe, but the spirit which animates it. But both are eternal, and will eternally exist, for the one cannot pass into, or absorb the other.—Pocock, Specimen Hist. Arab., 4to, Oxf. 1649, p. 138; Hyde, Veterum Persarum Historia, 8vo, Oxf. 1766; Spencer, De Legibus Hebraorum, 2 vols. fol. Camb. 1727.

SAME, in its primary sense, denotes identity.

In a secondary sense it denotes great *similarity*, and in popular usage admits of degrees, as when we speak of two things being *nearly* the *same*. To this ambiguity, Whately refers much of the error of *realism*; of Plato's theory of *ideas*; of the personification and deification in poetical mythology, &c.—Whately, *Log.*, App. i.

**SANCTION** (sancio, to ratify or confirm).—"I shall declare the sanction of this law of nature, viz., those rewards which God hath ordained for the observation of it, and those punishments He hath appointed for its breach or transgression."—Tyrell,

On the Law of Nature, p. 125.

"The sanctions of rewards and punishments which God has annexed to his laws have not, in any proper sense, the nature of obligation. They are only motives to virtue, adapted to the state and condition, the weakness and insensibility of man. They do not make or constitute duty, but presuppose it."—Adams, Sermons on Nature and Obligation of Virtue.

The consequences which naturally attend virtue and vice are the *sanction* of duty, or of doing what is right, as they are intended to encourage us to the discharge of it, and to deter us from the breach or neglect of it. And these natural

#### SANCTION-

consequences of virtue and vice are also a declaration, on the part of God, that He is in favour of the one and against the other, and are intimations, that His love of the one and His hatred of the other may be more fully manifested hereafter. By Locke, Paley, and Bentham, the term sanction, or enforcement of obedience, is applied to reward as well as to punishment. Mr. Austin (Province of Jurispr. Determined, p. 10) confines it to the latter; perhaps, because human laws only punish, and do not reward.

SAVAGE and BARBAROUS.—Ferguson (Essay on Hist. of Civ. Soc., part ii. sec. 2) states that the history of mankind, in their rudest state, may be considered under two heads, viz., that of the savage, who is not yet acquainted with property, and that of the barbarian, to whom it is, although not ascertained by laws, a principal object of care and desire.

The distinction here made between the savage and the barbarous states of society, resolves itself into the absence or presence of political government; for without political government, property cannot exist. The distinction is an important one; and it would be convenient to apply the term savage to communities which are permanently in a state of anarchy, which ordinarily exist without government, and to apply the term barbarous to communities, which, though in a rude state as regards the arts of life, are nevertheless subject to a government. In this sense, the North American Indians would be in a savage, while the Arab tribes, and most of the Asiatic nations, would be in a barbarous state. Montesquieu's distinction between savages and barbarians (Esprit des Lois, xviii. 11), is different in form, but in substance it is founded on the same principle. Hugh Murray (Enquiries respecting the Character of Nations, and the Progress of Society, Edin. 1808) lays it down (p. 230) that the savage form of society is without government.

According to many ancient and modern philosophers, the savage state was the primitive state of the human race. But others, especially Bonald and De Maistre, having maintained that the nations now found in a savage state have accidentally degenerated from the primitive state, which was a state of knowledge and civilization.

SCEPTICISM (σκέπτομαι, to look, to seek) is used as synonymous

## SCEPTICISM—

with doubt. But doubt may be removed by evidence, and give way to conviction or belief. The characteristic of scepticism is to come to no conclusion for or against—ἐποχή, holding off, and consequent tranquility—ἀταραξία. Scepticism is opposed to dogmatism. Absolute objective certainty being unattainable, scepticism holds that in the contradictions of the reason, truth is as much on one side as on the other—οὐδὲν μᾶλλον. It was first taught by Pyrrho, who flourished in Greece about 340 B.C. Hence it is sometimes called Pyrrhonism. The word is generally used in a bad sense, as equivalent to infidelity or unbelief. But in the following passages it means, more correctly, the absence of determination.

"We shall not ourselves venture to determine anything, in so great a point; but sceptically leave it undecided."—

Cudworth, Intell. Syst., p. 806.

"That all his arguments (Bp. Berkeley's) are, in reality, merely sceptical, appears from this, that they admit of no answer and produce no conviction. Their only effect is to cause that momentary amazement, and irresolution, and confusion, which is the result of scepticism."—Hume, Essays, note, p. 369, 4to ed.

"The writings of the best authors among the ancients being full and solid, tempt and carry me which way almost they will. He that I am reading seems always to have the most force; and I find that every one in turn has reason, though they contradict one another."

This is said by Montaigne, bk. ii. ch. 12, in the true spirit of scepticism.

"Que scais-je? was the motto of Montaigne,
As also of the first academicians;
That all is dubious which man may attain,
Was one of their most favourite positions.
There's no such thing as certainty, that's plain
As any of mutality's conditions;
So little do we know what we're about in
This world, I doubt if doubt itself be doubting."

Byron, Don Juan, Canto ix. xvii.

Glanvill (Joseph) has a work which he entitled Scepsis Scientifica, or the Folly of Dogmatising; Stäudlin wrote the History and Spirit of Scepticism, 2 vols., Leipsic, 1794–95; Sanchez (Fr.) or Sanctius wrote a Tractatus de multum nobili

### SCEPTICISM-

et prima universali scientia, quod nihil seitur, 4to, Lyons, 1581; Cronsaz has Examen du Pyrrhonisme Aneienne et Moderne.

SCHEMA (σχημα, shape), "termed by Mr. Semple effigiation, is the representation of a universal proceeding of the imagination to procure for a conception its image. To all conceptions an object must be given, and objects are given to us only through the modification of the sensibility. Pure conceptions à priori must contain à priori formal conditions of the sensibility (of the internal sense especially), under which alone the pureunderstanding-conception à priori can be applied to any object à priori. This formal and pure condition of sensibility, and to which the pure understanding-conception is restricted in its use, is termed by Kant the transcendental schema of this understanding-conception. The procedure with these sehemata, or the sensible conditions under which pure understanding alone can be used, he also termed the sehematismus of the pure understanding. The schema is only in itself a product of the imagination, but it is still to be distinguished from an image in this respect, that it is a single intuition. Five dots in a line, for example, are an image of the number five; but the schema of a conception, for instance, of a number in general, is more the representation of a method of representing a multitude according to a certain conception, for instance a thousand, in an image, than this image itself."-Haywood, Explan. of Terms in Crit. of Pure Reason.

SCHOLASTIC.—Scholasticus, as a Latin word, was first used by Petronius. Quintilian subsequently applied it to the rhetoricians in his day: and we read in Jerome, that Scrapion, having acquired great fame, received as a title of honour the surname Scholasticus. When the schools of the Middle Ages were opened, it was applied to those charged with the educa-

tion of youth.

"We see the original sense of the word scholastic," says Dr. Hampden (Bampton Leet., i. p. 7), "in the following passage:
—Omnes enim in scriptis suis causas tantum egerunt suas; et propriis magis laudibus quam aliorum utilitatibus consulentes, non id facere adnisi sunt ut salubres et salutiferi, sed ut scholastici ac diserti haberentur."—Salvianus, De Gubern. Dei, Præfat.

Scholastic Philosophy.—This phrase denotes a period rather

## SCHOLASTIC-

than a system of philosophy. It is the philosophy that was taught in the schools during the Middle Ages. The Middle Ages extend from the commencement of the ninth to the sixteenth century. What has been called the Classic Age of the scholastic philosophy, includes the thirteenth and fourteenth centuries. It begins when the metaphysics of Aristotle were introduced into France by Latin translations, and terminates with the Council of Florence and the taking of Constantinople. The only philosophy that was taught during that period was taught by the clergy; and was therefore very much mixed up with theology. The only way of teaching was by lectures or dictates; and hence the phrase, legere in philosophia. There was no one system uniformly taught; but different and conflicting opinions were held and promulgated by different doctors. The method was that of interpretation. Grammar was taught by prælections on Donatus and Priscian, and rhetoric by prelections on some parts of Cicero or Boethius. But logic shared most of their attention, and was taught by prælections on such of the works of Aristotle as were best known. The Timeus of Plato also occupied much of their attention; and they laboured to reconcile the doctrines of the one philosopher with those of the other.

Mr. Morell says (*Phil. of Religion*, p. 369), "It has been usual to divide the whole *scholastic* periods into three eras.\*—

1. That which was marked by the absolute subordination of philosophy to theology, that is, authority. 2. That which was marked by the friendly alliance of philosophy with dogmatic theology. 3. The commencement of a separation between the two, or the dawn of the entire independence of philosophy.

The first years of scholastic philosophy were marked by authority. In the ninth century, Joannes Scotus Erigena attempted to assert the claims of reason. Two hundred years after, the first era was brought to a close by Abelard. The second is marked by Albertus Magnus, Thomas Aquinas, and Duns Scotus. Raymond Lully, Roger Bacon, followed by Occam and the Nominalists, represent the third and declining era.

<sup>\*</sup> Tenneman makes four periods of scholastic philosophy, according to the prevalence of Realism or Nominalism.

### SCHOLASTIC-

According to Cousin (Euvres inédites d'Abelard, Introd. p. 45), it has three epochs. 1. From the eleventh century to the thirteenth and the organization of the university of Paris. This is the infancy of scholasticism. 2. From the thirteenth to the fifteenth century. This is the age of its manhood-when all the great universities of Europe and the great religious orders flourished. 3. From the fifteenth to the close of the sixteenth century. This is the period of its decay. And if from scholasticism you eliminate theology, it will be found as a philosophy to be the quarrel between Nominalism and Realism. quarrel may also be said to have three epochs. 1. Its birth, occasioned by a phrase of Porphyry's. 2. After the struggles of this period succeeded the apparent reign of one of the opinions. 3. The opinion which had been vanquished during the first period, and condemned to silence in the second, revived and triumphed in the third; and its triumph was the time of Of these three periods the second forms the scholasticism. golden age of the philosophy of the Middle Ages. It is the age of the Dominicans, Albertus Magnus, Thomas Aquinas, and Vincent de Beauvais; of the Franciscans, Alexander de Hales, Bonaventura, Duns Scotus, and Roger Bacon.

The taking of Constantinople by the Turks, the invention of printing, and the progress of the Reformation, put an end to the scholastic philosophy. Philosophy was no longer confined to the schools and to prelections. The press became a most extensive lecturer, and many embraced the opportuni-

ties offered of extending knowledge.

In addition to general histories of philosophy, see Rousselot, Etudes sur la Philosophie dans le Moyen Age, 3 tom. 8vo, Paris, 1840-42; Haureau, De la Philosophie Scholastique, 2 tom. 8vo, Paris, 1850; Cousin, Fragmens Philosophiques, tom. iii. Paris, 1840; also his Introduction to Œurres inedites d'Abelard.

is, knowledge of principles and causes.—[Rationalized knowledge. It is identical in meaning with philosophy; but, as matter of convenience, the word "science" has come to be applied to the philosophy of physical existence; the word "philosophy" to the science of mental existence.—Ed.]

Science (ἐπιστήμη) has its name from bringing us (ἐπὶ στάσιν)

## SCIENCE-

to some stop and boundary of things, taking us away from the unbounded nature and mutability of particulars; for it is conversant about subjects that are general and invariable. This etymology given by Nicephorus (Blemmida), and long before him adopted by the Peripatetics, came originally from Plato, as may be seen in his *Cratylus*.

" Oτι scientiæ fundamentum est, διότι fastigium."—Tren-

delenburg, Elementa Log. Artist., p. 76.

Sir W. Hamilton, Lects. on Logic, defined science as a "complement of cognitions, having, in point of form, the character of logical perfection, and in point of matter, the character of real truth."

Science, art, and empiricism, are defined by Sopater, On Hermogenes, apud. Rhet. Gr., vol. v. pp. 3-5, ed. Walz, as follows:—Science consists in an infallible and unchanging knowledge of phenomena. Art is a system formed from observation, and directed to a useful end. Empiricism is an unreasoning and instinctive imitation of previous practice. Art is of three kinds—theoretic, practical, and mixed.

"No art, however, is purely theoretic or contemplative. The examples given are of *science*, not art. It is a part of grammatical *science* to say that all words with a certain termination have a certain accent. When this is converted into a rule, it becomes part of an art."—Sir G. C. Lewis, On Methods

of Observ. in Politics, ch. 19, sec. 2.

"In science, scimus ut sciamus; in art, scimus ut producamus. And, therefore, science and art may be said to be investigations of truth: but one, science, inquires for the sake of knowledge: the other, art, for the sake of production: and hence science is more concerned with the higher truths, art with the lower: and science never is engaged as art is in productive application. And the most perfect state of science, therefore, will be the most high and accurate inquiry; the perfection of art will be the most apt and efficient system of rules: art always throwing itself into the form of rules."—Karslake, Aids to Log., bk. i. p. 24. This distinction of science and art is given in Aristotle. See Poster. Analyt., i. 194, ii. 13.

"Science and art differ from one another, as the understanding differs from the will, or as the indicative mood in grammar differs from the imperative. The one deals in facts,

#### SCIENCE-

the other in precepts. Science is a collection of truths; art a body of rules, or directions for conduct. The language of science is, This is, or, This is not; This does, or does not happen. The language of art is, Do this, Avoid that. Science takes cognizance of a phenomenon, and endeavours to discover its law; art proposes to itself an end, and looks out for means to effect it."—J. S. Mill, Essays on Pol. Econ.

sciences (The Occult) are s<sub>0</sub> called (from occulto, to hide or conceal), because they have reference to qualities or powers which are not such as are common or commonly known. The belief in beings having superhuman powers, as fairies, familiars, dæmons, &c., in augury, oracles, witchcraft, &c., in dreams and visions, &c., in divination and astrology, &c., and in talismans and amulets, &c., leads to the prosecution of what has been called the Occult Sciences.—See a vol. under this title in the cabinet edition of the Encyclopædia Metropolitana.

SCIENTIA (Media).—"According to Molina, the objects of the divine knowledge are the possible, the actual, and the conditional. The knowledge of the possible is simple intelligence; of the actual, scientia visionis; and of the conditional, scientia media, intermediate between that of intelligence and vision. An example of scientia media is that of David asking the oracle if the inhabitants of the city of Keilah, in which he meant to take refuge, would deliver it up to Saul if he laid siege to it. The answer was in the affirmative, whereupon David took a different course."—Leibnitz, Sur la Bonte de Dicu, partie 1, sec. 40.

In La Cause de Dieu, &c., sec. 17, Leibnitz has said, "Scientia media might rather be understood to mean the science not only of future conditionals, but universally of all future contingents. Then science of simple intelligence would be restricted to the knowledge of truths possible and necessary; scientia visionis to that of truths contingent and actual. Scientia media would thus have it in common with the first, that it concerned truths possible; and with the second, that it applied to truths contingent."—See Reid, Act. Pow., essay in second.

SCIOLIST (sciolus), one who thinks he knows much and knows but little.—"Some have the hap to be termed learned men,

### SCIOLIST-

though they have gathered up but the scraps of knowledge here and there, though they be but smatterers and mere sciolists."—Howell, Letters, bk. iii. let. 8.

SCIOMACHY (σχιά, a shadow; and μάχη, a fight),—[conflict with

imaginary foes.]

SECULARISM is the Latin word for this-world-ism, and means, "attend to the world that you are now in, and let the next

alone."—Arnot, Illust. of Proverbs, p. 368.

Its capital principles are—1. That attention to temporal things should take precedence of considerations relating to a future existence. 2. That science is the province of life, and that spiritual dependency in human affairs may be attended with material destruction. 3. That there exist, independently of scriptural religion, guarantees of morality in human nature, intelligence, and utility.

The aim of *secularism* is to aggrandize the present life. For eternity, it substitutes time; for providence, science;

for fidelity to the Omniscient, usefulness to man.

SECUNDUM QUID (τὸ καθ ὅ) is opposed to Secundum ipsum (τὸ καθ αὐτο) as the relative to the non-relative or the limited to the unlimited. Mr Maurice illustrates Secundum quid by a passage from "As you like it:" "In respect that it is of the country it is a good life, but in respect it is not of the court it is a vile life."—Artist., Metaphys., lib. iv. ch. 20.

SELF-CONSCIOUSNESS.—[The knowledge which the mind

has of itself in every form of experience.—Ed.]

SELFISHNESS "consists not in the indulging of this or that particular propensity, but in disregarding, for the sake of any kind of personal gratification or advantage, the rights or the feelings of other men.

"Each person 'has a self of his own.' And, consequently, though you may be of a character very unlike that of some selfish person, you may yet be, in your own way, quite as selfish as he. And it is possible to be selfish in the highest degree, without being at all too much actuated by self-love, but unduly neglectful of others when your own gratification, of whatever kind, is concerned."—Whatley, Lessons on Morals, p. 143.

Selfishness exists only in reference to others, and could have no place in one who lived alone on a desert island, though he

## SELFISHNESS-

might have, of course, every degree of self-love; for selfishness is not an excess of self-love, and consists not in an over-desire of happiness, but in placing your happiness in something which interferes with, or leaves you regardless of that of others. Nor are we to suppose that selfishness and want of feeling are either the same or inseparable. For, on the one hand, I have known such as have had very little feeling, but felt for others as much nearly as for themselves, and were, therefore, far from selfish; and, on the other hand, some, of very acute feelings, feel for no one but themselves, and, indeed, are sometimes among the most cruel."—Whately, On Bacon, p. 221.

SELF-EVIDENT.—[Carrying the evidence of truth in itself. A self-evident proposition is one whose terms need only to be understood in order that it may be accepted as true.—Ed.]

SELF-LOVE [a rational regard to one's own good], is sometimes used in a general sense to denote all those principles of our nature which prompt us to seek our own good, just as those principles which lead us to seek the good of others are all comprehended under the name of benevolence. All our desires tend towards the attainment of some good or the averting of some evil—having reference either to ourselves or others, and may therefore be brought under the two heads of benevolence and self-love.

Self-love is more strictly used to signify "the desire for our own welfare, as such." In this sense, "it is quite distinct from all our other desires and propensities," says Dr. Whately (Lessons on Morals, p. 142), "though it may often tend in the same direction with some of them. One person, for instance, may drink some water because he is thirsty; and another may, without thirst, drink—suppose from a mineral spring, because he believes it will be good for his health. This latter is impelled by self-love, but not the other."

Dr. Hutcheson, who maintains that kind affection is what constitutes an agent virtuous, has said, that he who cherishes kind affection towards all, may also love himself; may love himself as a part of the whole system of rational and sentient beings; may promote his own happiness in preference to that of another who is not more deserving of his love; and may be innocently solicitous about himself, while he is wisely

## SELF-LOVE-

benevolent towards all.—Inquiry concerning Moral Good and

Evil, sec. iii.

The error of Hobbes, and the school of philosophers who maintained that in doing good to others our ultimate aim is to do good to ourselves, lay in supposing that there is any antagonism between benevolence and self-love.

In opposition to the views of Hobbes and the selfish school of philosophers, see Butler, Scrmons, On Hum. Nat., On Compassion, &c.; Turnbull, Nature and Origin of Laws, vol. ii. p. 258; Hume, On General Principles of Morals, sec. 2; Hutcheson, Inquiry concerning Moral Good and Evil, sec. 2; Hazlitt, Essay on Principles of Hum. Action, p. 239; Mackintosh, View of Ethical Philosophy, p. 192.

SEMATOLOGY (σημα, a sign; and λόγος, discourse), the doctrine

of signs.

**SENSATION.**—[The feeling which is the result of a single impression on any part of the sensitive organism.—Ed.] "The earliest sign by which the Ego becomes perceptible is

corporeal sensation.

"Without this general innate scnsation we should not possess the certainty that our body is our body; for it is as much an object for the other senses as anything else that we can see, hear, taste, or feel. This original general innate scnsation is necessary to the existence of all other particular sensations, and may exist independently of the nervous system. Polypi, animals of the simplest structure, without a nervous system distinct from the rest of the organic mass, show traces of innate sensation. The light by means of which we see, acts not only on the visual nerves, but also on the fluids of the eye, and the sensations of sight partly depend on the structure of the eye. This sensibility, therefore, appears to be a necessary attribute of animated organic matter itself.

"All the perceptions of sense are rooted in the general sensation. The child must be conscious of his senses before he applies them. This sensation, however, is very obscure; even pain is not clearly felt by it at the place where it exists. Equally obscure is the notion which it entertains of an object. Though Brach, therefore, is right in ascribing something objective, even to the general sensation, since conditions

## SENSATION-

cannot communicate themselves, without communicating (though ever so obscurely) something of that which produces the condition—nay, strictly speaking, as even in the idea 'snbject,' that of an 'object' is involved, yet it is advisable to abide by the distinction founded by Kant, according to which, by innate sensation, we especially perceive our own personality (subject), and by the senses we specially perceive objects, and thus in the ascending line, feeling, taste, smell, hearing, and sight.

"The next step from this obscure original innate sensation is particular sensation through the medium of the nervous system, which, in its more profound, and yet more obscure sphere, produces common sensation (CENESTHESIS), and in a higher manifestation, the perceptions of the senses. Concsthesis, or common feeling, is referred to the ganglionic nerves. It may be called subjective, inasmuch as the body itself gives the excitement to the nerve concerned.\* By the Conesthesis, states of our body are revealed to us which have their seat in the sphere of the vegetative life. These states are-1. General:—corporeal heaviness and buovancy, atony, toniety. 2. Special:—hunger, thirst, sexual instinct, &c. The sensations of pain, titillation, itching, &c., which are generally cited here, belong, in their more common acceptation, to the general corporeal feeling; in their more local limitation, with distinct perception of the object exciting, to the sense of touch; but when they arise from the nervous system allotted to the vegetative sphere of the body, they certainly belong to the Conesthesis in the more limited sense of the word,

"To this class belongs especially the anxiety arising from impediment in respiration, and from nausea.

"In the analysis of the psycho-physical processes proceeding outwards from sensation to perception, we encounter after the organs of the Cœnesthesis, the organs of sense."—Feuchtersleben, Med. Psychology, 1847, p. 83.

Sensation and Perception.—"A conscious presentation, if it refers exclusively to the subject, as a modification of our own being, is = sensation. The same if it refers to an object, is

<sup>\*</sup> However subjective this sensation is, there is always in it the indication of an object, as Brach shows; hence illustrating the instinct of animals. Presentiment, too, chiefly belongs to this system,

#### SENSATION—

= perception."—Coleridge, Church and State—quoted by Thomson, Outline of Laws of Thought, p. 104.

Rousseau distinguished sensations as affectives, or giving pleasure or pain; and representatives, or giving knowledge of objects external.

Paffe (Sur la Sensibilité) distinguishes the element affectif and the element instructif.

In like manner Dr. Reid regards sensation not only as a state of feeling, but a sign of that which occasions it.

Bozelli (De l'Union de la Philosoph. avec la Morale) calls sensations, in so far as they are representative, in their philosophical form, in so far as they give pleasure or pain, in their moral form or character.

"To sensation I owe all the certainty I have of my existence as a sentient being, to perception a certainty not less absolute, that there are other beings besides me."—Thurot, De l'Entendement, &c., tom. i. p. 43.

Sensation properly expresses that change in the state of the mind which is produced by an impression upon an organ of sense (of which change we can conceive the mind to be conscious, without any knowledge of external objects): perception, on the other hand, expresses the knowledge or the intimations we obtain, by means of our sensations, concerning the qualities of matter; and consequently involves, in every instance, the notion of externality or outness, which it is necessary to exclude in order to seize the precise import of the word sensation.

Sensation has been employed to denote—

1. The process of sensitive apprehension, both in its subjective and its objective relations; like the Greek asthesis.

2. It was limited first in the Cartesian school, and thereafter in that of Reid, to the subjective phasis of our sensitive cognitions.—Sir W. Hamilton, Reid's Works, note D\*.

Sensation proper is not purely a passive state, but implies a certain amount of mental activity. It may be described, on the psychological side, as resulting directly from the attention which the mind gives to the affections of its own organism. This description may at first sight appear to be at variance with the facts of the case, inasmuch as every severe affection of the body produces pain, quite independently

## SENSATION-

of any knowledge we may possess of the cause or of any operation of the will being directed towards it. Facts, however, rightly analyzed, show us, that if the attention of the mind be absorbed in other things, no impulse, though it amount to the laceration of the nerves, can produce in us the slightest feeling. Extreme enthusiasm, or powerful emotion of any kind, can make us altogether insensible even to physical injury. For this reason it is that the soldier on the field of battle is often wounded during the heat of the combat, without discovering it till exhausted by loss of blood. Numerous facts of a similar kind prove demonstrably, that a certain application and exercise of mind, on one side, is as necessary to the existence of sensation, as the occurrence of physical impulse, on the other."—Morell, Psychology, p. 107; Stewart, Phil. Essays, note F (it is G in last ed.); see also Outlines, sec. 14; Reid, Essays, Intell. Pow., essay i. ch. 1; Morell, Phil. of Religion, p. 7.

SENSATIONALISM.—[The theory which makes sensation the sole origin of human knowledge. Its formula is-nihil est in intellectu, nisi prius furerit in sensu.—Ed.]

SENSE, in psychology, is employed ambiguously—1. For the faculty of sensitive apprehension. 2. For its act. 3. For its organ.

SENSES (REFLEX).—Dr. Hutcheson seems to have been in some measure sensible of the inadequacy of Mr. Locke's account of the origin of our ideas, and maintained, that in addition to those which we have by means of sensation and reflection, we also acquire ideas by means of certain powers of perception, which he called internal and reflex senses. According to his psychology, our powers of perception may be called direct or antecedent, and consequent or reflex. hear a sound, or see colour, by means of senses which operate directly on their objects; and do not suppose any antecedent perception. But we perceive the harmony of sound, and the beauty of colour, by means of faculties which operate reflexly, or in consequence of some preceding perception. And the moral sense was regarded by him as a faculty of this kind. Reflection, from which, according to Mr. Locke, we derive the simple ideas of the passions and affections of mind, was considered by Hutcheson as an internal sense or faculty,

SENSES-

operating directly. But that faculty by which we perceive the beauty or deformity, the virtue or vice, of these passions and affections, was called by Hutcheson, a reflex, internal sense. A mental tendency he called determination or sense. He defined a sense in this application of it "a determination to receive ideas, independent of our will," and he enumerates several such tendencies or determinations which he calls reflex senses.—Illustrations of the Moral Sense, sec. 1; Inquiry concerning Moral Good and Evil, sec. 1; Mor. Phil., bk. i. ch. 4, sec. 4, and also sec. 5.

SENSIBILITY (τὸ αἰσθητικόν).—[Capacity for receiving impression, belonging to the extremity of the nerves of sensation, wherever situated in the body. This stands in contrast with Sensation.—Ed.] It is now used as a general term to denote the capacity of feeling, as distinguished from intellect and will. It includes sensations both external and internal, whether derived from contemplating outward and material objects, or relations and ideas, desires, affections, passions. It also includes the sentiments of the sublime and beautiful, the moral sentiment and the religious sentiment; and, in short, every modification of feeling of which we are susceptible. By the ancient philosophers the sensibility under the name of appetite was confounded with the will. The Scotch philosophers have analyzed the various forms of the sensibility under the name of active principles: but they have not gathered them under one head, and have sometimes treated of them in connection with things very different.

SENSIBLES, COMMON and PROPER (sensile or sensibile, that which is capable of affecting some sense, that which is

the object of sense).

Aristotle distinguished sensibles into common and proper (De Anima, lib. ii. ch. 2, lib. iii. ch. 1; De Sensu et Sensili, ch. 1). The common, those perceived by all or by a plurality of senses, were magnitude, figure, motion, rest, number. To these five, some of the schoolmen (but out of Aristotle) added place, distance, position, and continuity.—Sir W. Hamilton, Reid's Works, p. 124, note. Aristotle admitted, however (De Anima, lib. iii. ch. 1, 4), that the common sensibles are not properly objects of sense; but merely con-comitants or con-sequents of the perception of the proper sensibles.

## SENSIBLES—

This is noticed by Hutcheson (Mor. Phil., bk. i. ch. 1), commended by Price (Review, p. 56, 1st ed.) by Mr. Stewart, (Philosoph. Essays, pp. 31, 46, 551, 4to), and by Royer Collard (Euvres de Reid, tom. iii. p. 431).

"Sensibile commune dieitur quod vel percipitur pluribus sensibus, vel ad quod cognoscendum, ab intelleetu vel-imaginatione desumitur occasio, ex variis sensibus; ut sunt figura, motus, ubicatio, duratio, magnitudo, distantia, numerus," &c.—Compton Carleton, Phil. Univ. De Anima., diss. 16 lect. ii. scc. 1.

The proper sensibles are those objects of sense which are peculiar to one sense; as colour to the eye, sound to the car, taste to the palate, and touch to the body.—Hamilton, Reid, p. 828.

SENSISM, SENSUALISM, or SENSUISM, is the doctrine that all our knowledge is derived originally from sense.

It is not the same as *Empiricism*, though sometimes confounded with it. *Empiricism* rests exclusively on experience, and rejects all ideas which are à priori. But all experience is not that of sense. *Empiricism* admits facts and nothing but facts, but all facts which have been observed. *Sensism* gives the single fact of sensation as sufficient to explain all mental phenomena. Locke is *empirical*, Condillac is *sensual*.

Sensuism, "in the emphatic language of Fichte, is called 'The dirt-philosophy.'"—Sir Will. Hamilton, Discussions, p. 38, see also p. 2.—V. Empiricism, Ideology.

SENSORIUM (αἰσθητήριον), is the organ by which, or place in which, the sensations of the several senses are reduced to the unity of conscience. This central organ is the brain. According to Aristotle it was in all warm-blooded animals the heart, and therefore so in man; the pineal gland according to Descartes; the ventricles or the corpus callosum according to others.

Sensorium signifies not so properly the organ as the place of sensation. The eye, the ear, &c., are organs; but they are not sensoria. Sir Isaac Newton does not say that space is a sensorium; but that it is (by way of comparison), so to say, the sensorium, &c.—Clarke, Second Reply to Leibnitz.

Leibnitz adopted and defended (Answer to the Second Reply of Clarke) the explanation of Rudolphus Goelenius, who, in his

#### SENSORIUM-

Lexicon Philosophicum, under Sensitorium, says, "Barbarum scholasticorum, qui interdum sunt simiæ Græcorum. Hi dicunt Αἰσθητήριον. Ex quo illi fecerunt sensitorium pro sensorio, id est, organum sensationis."

SENSUS COMMUNIS (κοινὴ αἴσθησις).—This latter phrase was employed by Aristotle and the Peripatetics "to denote the faculty in which the various reports of the several senses are reduced to the unity of a common apperception."—Sir Will. Hamilton, Reid's Works, p. 757, note.

This faculty had an organ which was called Sensorium Com-

mune.

Mr Stewart (note p, part ii. of Elements) says:—The sensus communis of the schoolmen denotes the power whereby the mind is enabled to represent to itself any absent object of perception, or any sensation which it has formerly experienced. Its seat was supposed to be that part of the brain (hence called the sensorium or sensorium communc) where the nerves from all the organs of perception terminate. Of the peculiar function allotted to it in the scale of our intellectual faculties, the following account is given by Hobbes:—"Some say the senses receive the species of things and deliver them to the common sense; and the common sense delivers them over to the fancy; and the fancy to the memory; and the memory to the judgment—like handing of things from one to another, with many words making nothing understood."—Of Man, part i. ch. 2.

Mr Stewart says the *sensus communis* is perfectly synonymous with the word conception, that is, the power by which we represent an object of sense, whether present or absent. But it is doubtful whether *sensus communis* was applied by the schoolmen to the reproduction of absent objects of sense.

SENTIMENT,—[a form of feeling consequent on a judgment. Moral sentiments are forms of feeling dependent upon judgments as to the moral actions of ourselves and others.—Ed.] A sentiment implies an idea (or judgment), because the will is not moved nor the sensibility affected without knowing. But an idea or judgment does not infer feeling or sentiment.—Buffier, Log., ii. art. 9.

"The word sentiment, in the English language, never, as I

## SENTIMENT-

conceive, signifies mere feeling, but judgment accompanied with feeling.\* It was wont to signify opinion or judgment of any kind, but, of late, is appropriated to signify an opinion or judgment that strikes, and produces some agreeable or uneasy emotion. So we speak of sentiments of respect, of esteem, of gratitude; but I never heard the pain of the gout, or any other severe feeling, called a sentiment."—Reid, Act. Pow., essay v. ch. 7.

"Mr Hume sometimes employs (after the manner of the French metaphysicians) sentiment as synonymous with feeling; a use of the word quite unprecedented in our tongue."—

Philosoph. Essays, last ed. note E.

"There are two sensibilities—the one turned towards nature and transmitting the impressions received from it, the other hid in the depths of our organization and receiving the impression of all that passes in the soul. Have we discovered truth—we experience a sentiment. Have we done a good deed-we experience a sentiment. A sentiment is but the echo of reason, but is sometimes better heard than reason itself. Sentiment, which accompanies the intelligence in all its movements, has, like the intelligence, a spontaneous and a reflective movement. By itself it is a source of emotion, not of knowledge. Knowledge or judgment is invariable, whatever be our health or spirits. Sentiment varies with health and spirits. I always judge the Apollo Belvidere to be beautiful, but I do not always feel the sentiment of his beauty. A bright or gloomy day, sadness or serenity of mind, affect my sentiments, but not my judgment.

"Mysticism would suppress reason and expand sentiment."

-See Cousin, Œuvres, tom. ii. p. 96.

Those pleasures and pains which spring up in connection with a modification of our organism or the perceptions of the senses, are called sensations. But the state of our mind, the exercise of thought, conceptions purely intellectual, are the occasion to us of high enjoyment or lively suffering; for these pleasures and pains of a different kind is reserved the name of sentiments.—Manuel de Philosophie, 8vo, Paris, 1846, p. 142.

<sup>• &</sup>quot;This is too unqualified an assertion. The term sentiment is in English applied to the higher feelings."—Sir William Hamilton.

## SENTIMENT-

"The word sentiment, agreeably to the use made of it by our best English writers, expresses, in my opinion, very happily those complex determinations of the mind which result from the co-operation of our rational powers and our moral feelings. We do not speak of a man's sentiments concerning a mechanical contrivance, or a physical hypothesis, or concerning any speculative question whatever, by which the feelings are not liable to be roused or the heart affected.

"This account of the meaning of the word corresponds, I think, exactly with the use made of it by Mr. Smith in the title of his *Theory* (of Moral Sentiments)."—Stewart, Philosoph. Essays, note D.

Sentiment and Opinion.—Dr. Beattie (Essay on Truth, part ii. ch. 1, sec. 1) has said, "that the true and the old English sense of the word sentiment, is a formed opinion, notion, or principle." Dr. Reid, in his Essays on the Intell. Powers, speaks of the sentiments of Mr. Locke concerning perception; and of the sentiments of Arnauld, Berkeley, and Hume concerning ideas.

The title of chap. 7, essay ii. of Reid on *Intell. Powers*, is Sentiments of Philosophers, &c., on which Sir W. Hamilton's note, p. 269, is, "Sentiment, as here and elsewhere employed by Reid, in the meaning of opinion (sententia), is not to be imitated."

SIGN (signum, a mark).—The definition of a sign is "that which represents anything to the cognitive faculty." We have knowledge by sense and by intellect, and a sign may be addressed to either or to both—as smoke, which to the eye and to the intellect indicates or signifies fire; so that a sign has a twofold relation—to the thing signified and to the cognitive faculty.

"Signs are either to represent or resemble things, or only to intimate and suggest them to the mind. And our ideas being the signs of what is intended or supposed therein, are in such sort and so far right, as they do either represent or resemble the object of thought, or as they do at least intimate it to the mind, by virtue of some natural connection or proper appointment."—Oldfield, Essay on Reason, p. 184.

Signs are divided into natural and conventional. A natural

SIGN-

sign has the power of signifying from its own nature, so that at all times, in all places, and with all people it signifies the same thing, as smoke is the sign of fire. A conventional sign has not the power of signifying in its own nature, but supposes the knowledge and remembrance of what is signified in him to whom it is addressed, as three balls are the conventionally understood sign of a pawnbroker's shop.

In his philosophy Dr. Reid makes great use of the doctrine He arranges them in three classes,—1. of natural signs. Those whose connection with the thing signified is established by nature, but discovered only by experience, as natural causes are signs of their effects; and hence philosophy is called an interpretation of nature. 2. Those wherein the connection between the sign and thing signified is not only established by nature, but discovered to us by a natural principle without reasoning or experience. Of this class are the natural signs of human thoughts, purposes, and desires, such as modulations of the voice, gestures of the body, and features of the face, which may be called natural language, in opposition to that which is spoken or written. 3. A third class of natural signs comprehends those which, though we never before had any notion or conception of the thing signified, do suggest it, and at once give us a conception and create a belief of it. In this way consciousness, in all its modifications, gives the conception and belief of a being who thinks-Cogito ergo sum.

"As the first class of natural signs is the foundation of true philosophy, so the second is the foundation of the fine arts or of taste, and the last is the foundation of common sense."—Reid, Inquiry, ch. 5, sec. 3.

The doctrine or science of signs has been called Sematology. And as the signs which the mind makes use of in order to obtain and to communicate knowledge are words; the proper and skilful use of words is in different ways the object of—1. Grammar; 2. Logic; and 3. Rhetorie.—Smart, Sematology, 8vo, Lond. 1839.

See Berkeley, Minute Phil., dial. iv. sec. 7, 11, 12; New Theory of Vision, sec. 144, 147; Theory of Vision Vindicated, sec. 38-43. Hutcheson, Synopsis Metaphys., part ii. ch. 1; Mor. Phil., bk. i. ch. 1, p. 5. De Gerando, Des Signes et

SIGN—

de l'Art de Penser; Adam Smith, On the Formation of Language.

SIMILE. - V. METAPHOR.

SIN.—V. EVIL.

**SINCERITY** implies singleness and honesty. The Latin word sincerum signifies what is without mixture, and has been thought to be compounded of sine cera, without wax, as pure honey is.

"Sincerity and sincere have a twofold meaning of great moral importance. Sincerity is often used to denote 'mere reality of conviction;' that a man actually believes what he professes to believe. Sometimes, again, it is used to denote 'unbiassed conviction,' or, at least, an earnest endeavour to shake off all prejudices, and all undue influence of wishes and passions on the judgment, and to decide impartially."—Whately, Log., App. i.

SINGULAR.— V. TERM.

socialism.—[The theory which advocates community of property, on the ground of the abnegation of personal and individual rights.—Ed.] In the various forms under which society has existed, private property, individual industry and enterprise, and the rights of marriage and of the family, have been recognized. Of late years several schemes of social arrangement have been proposed, in which one or all of these principles have been abandoned or modified. These schemes may be comprehended under the general term of socialism. The motto of them all is solidarite.

Communism demands a community of goods or property. Fourierism or Phalansterism would deliver men over to the guidance of their passions and instincts, and destroy all domestic and moral discipline. Saint Simonism or Humanitarianism holds that human nature has three great functions, that of the priesthood, science, and industry. Each of these is represented in a College, above which is the father or head, spiritual and temporal, whose will is the supreme and living law of the society. Its religion is pantheism, its morality materialism or epicurism, and its politics despotism.—Dict. des Sciences Philosoph.

SOCIETY (Desire of).—"God having designed man for a sociable creature, made him not only with an inclination, and

SOCIETY-

under a necessity to have fellowship with those of his own kind, but furnished him also with language, which was to be the great instrument and common tie of society."—Locke,

Essay on Hum. Understand., bk. iii. ch. 1.

That the desire of society is natural to man, is argued by Plato in the Second Book of his Republic. It is also hinted at in his dialogue entitled Protagoras. The argument is unfolded by Harris in his Dialogue concerning Happiness, sec. 12. Aristotle has said at the beginning of his Politics,—"The tendency to the social state is in all men by nature." The argument in favour of society from our being possessed of speech is insisted on by him, Polit., lib. i. cap. 2. Also by Cicero, De Legibus, lib. i. cap. 9; De Officiis, lib. i. cap. 16; De Nat. Deorum, lib. ii. cap. 59.

In modern times, Hobbes argued that man is naturally an enemy to his fellow-men, and that society is a device to defend men from the evils which they would bring on one another. Hutcheson wrote his inaugural oration when admitted Professor of Moral Philosophy at Glasgow, in opposition to Hobbes, De Naturali Hominum Socialitate,

4to, Glasg. Typis Academ. 1730.

Man is a social animal, according to Seneca (De Clem., i. 3). Lactantius says that he is a social animal by nature (Div. Inst., vi. 10), in which he follows Cicero (De Offic., i. 14). "Mankind have always wandered or settled, agreed or quarrelled, in troops and companies."—Ferguson, Essay on Hist. of Civ. Soc., p. 26. See also Lord Kames, Hist, of Man, bk. ii, sketch 1; Filangieri, Scienza della Legislazione, lib. i. ch. 1. "La nature de l'homme le porte à vivre en société. Quelle qu'en soit la canse, le fait se manifeste en toute occasion. Partout où l'on a recontré des hommes, ils vivaient en troupes, en herdes, en corps de nation. Peut-être est ce afin d'unir leur forces pour leur sûreté commune; peut-être afin de pourvoir plus aisément à leur besoins; toujours il est vrai qu'il est dans la nature de l'homme de se reunir en société, comme font les abeilles et plusieurs espèces d'animaux; on remarque des traits communs dans toutes ces reunions d'hommes, en quelque parti du monde qu'ils habitent."-Say, Cours d'Econ. Polit., tom. vi. Compare Comte, ibid, tom. iv. p. 54.

## SOCIETY-

This gregarious propensity is different from the political capacity, which has been laid down as the characteristic of man.

Society (Political, Capacity of).—Command and obedience, which are essential to government, are peculiar to mankind. Man is singular in commanding not only the inferior animals, but his own species. Hence men alone form a political community. It has been laid down by Aristotle and others, that this difference is owing to the exclusive possession of reason and speech by man, and to his power of discriminating between justice and injustice (Polit., i. 2). Animals, says Cicero, are unfitted for political society, as being "rationis et orationis expertes."—De Offic., i. 16. Separat have nos a grege mutorum.—Juvenal, xv. 142–158.

SOCIOLOGY, or Social Science, treats of the laws of the social development of the human race.

SOMATOLOGY. - V. NATURE.

somnambulism (somnus, sleep; ambulo, to walk), sleep-walking.—[The state in which the sleeper prosecutes active exercise, with observation of external objects, and definite purpose in his efforts. In this state the eyes are commonly open, but bear no evidence of exercise in perception. Yet external objects are recognized, and are avoided or utilized as occasion requires.] See Horstius, De natura differentiis et causis corum qui dormientes ambulant, Lips. 1593; Richter, Dissertatio de statu mixto somni et stgilia, &c.; Goeth. 1756.

SOPHISM, SOPHISTER, SOPHISTICAL (Σόφισμα, from σοφία, wisdom).—"They were called sophisters, as who would say,

Counterfeit wise men."—North, Plutarch, p. 96.

"For lyke wyse as though a Sophyster woulde with a fonde argumente, prove unto a symple soule, that two egges were three, because that ther is one, and that ther be twayne, and one and twayne make three; yt symple unlearned man, though he lacke learnying to soyle hys fonde argument, hath yet wit ynough to laugh thereat, and to eat the two egges himself, and byd the Sophyster tak and eat the thyrde."—Sir T. More, Works, p. 475.

"Sophism is a false argument. This word is not usually applied to mere errors in reasoning; but only to those erroneous reasonings of the fallacy of which the person who

#### SOPHISM-

maintains them is, in some degree, conscious; and which he endeavours to conceal from examination by subtilty, and by some ambiguity, or other unfairness in the use of words."—Taylor, Elements of Thought.

According to Aristotle, the sophism is a syllogismus contentiosus, a syllogism framed not for enouncing or proving the truth, but for disputation. It is constructed so as to seem to warrant the conclusion, but does not, and is faulty either in form or argument.—Trendelenburg, Lineamenta Log. Arist., sec. 33, 8vo, Berol. 1842.

See Reid, Aecount of Aristotle's Logic, ch. 5, sec. 3; Sir Alex, Grant, Ethics of Aristotle, vol. i. p. 109.

On the difference of meaning between φιλόσοφος, and σοφιστής, see Sheppard, Characters of Theophrastus, 8vo, Lond. 1852, p. 81, and p. 269. See also Grote, Hist. of Greece, vol. viii. pp. 434–486, and the Cambridge Journal of Philosophy, No. 2.—V. Fallacy.

SORITES (σωρός, a heap) is an argument composed of an indeterminate number of propositions, so arranged that the predicate of the first becomes the subject of the second, the predicate of the second the subject of the third, and so on till you come to a conclusion which unites the subject of the first with the predicate of the last. A is B, B is C, C is D, D is E, therefore A is E.

This is the Direct or Common form of the Sorites. The Reversed form is also called the Goclenian, from Goclenius of Marburg, who first analyzed it about the end of the sixteenth century. It differs from the common form in two respects.—1. Its premises are reversed; and, 2. It begins with the premise containing the two terms which have the greatest extension, while the common form starts with the premise containing the terms which have the greatest comprehension. Thus—D is E, C is D, B is C, A is B, therefore A is E.

SOUL (ψυχή, anima). This word had formerly a wider signification than now. In the Second Book of his Treatise Περί ψυχῆς, Aristotle has given two definitions of it. In the first of these he calls it "the Entelechy, or first form of an organized body which has potential life." The word Ἐντελέχεια, which Dr. Reid begged to be excused from translating, because he did not know the meaning of

SOUL-

it, is compounded of ἔντελες, perfect; ἔχειν, to have; and τέλος, an end. Its use was revived by Leibnitz, who designated by it that which possesses in itself the principle of its own activity, and tends towards its end. According to his philosophy, the universe is made up of monads or forces, each active in itself, and tending by its activity to accomplish its proper end. In the philosophy of Aristotle, the word Entelechy, or first form, had a similar meaning, and denoted that which in virtue of an end constituted the essence of things, and gave movement to matter. When the soul then is called the Entelechy of an organized body having potential life, the meaning is, that it is force or power by which life develops itself in bodies destined to receive it.

Aristotle distinguished several forms of soul, viz., the nutritive or vegetative soul, by which plants and animals had growth and reproduction. The sensitive, which was the cause of sensation and feeling. The motive, of locomotion. The appetitive, which was the source of desire and will; and the rational or reasonable, which was the scat of reason or intellect. These powers or energies of soul exist all in some beings; some of them only in other beings; and in some beings only one of them. That is to say, man possesses all; brutes possess some; plants one only. In the scholastic philosophy, desire and locomotion were not regarded as simple powers or energies—and only the nutritive or vegetative soul, the sensitive or animal, and the rational or human were recognized.

In the system of Plato, three forms or energies of soul were assigned to man. The rational, which had its seat in the head and survived the dissolution of the body—the irascible, which had its seat in the heart and was the spring of activity and movement, and the appetitive or concupiscible, which was the source of the grosser passions and physical instincts, and which died with the bodily organs with which it was united. A similar distinction between the forms or energies of the soul has been ascribed to Pythagoras, and traces of it are to be found in several of the philosophical systems of the East.

Among modern philosophers in Germany, a distinction is taken between ψυχή (Seele) and πυεῦμα (Geist), or soul and spirit. According to G. H. Schubert, professor at Munich,

SOUL—

and a follower of Schelling, the soul is the inferior part of our intellectual nature—that which shows itself in the phenomena of dreaming, and which is connected with the state of the brain. The *spirit* is that part of our nature which tends to the purely rational, the lofty, and divine. The doctrine of the natural and the spiritual man, which we find in the writings of St. Paul, may, it has been thought, have formed the basis upon which this mental dualism has been founded. Indeed it has been maintained that the dualism of the thinking principle is distinctly indicated by the apostle when he says of the Word of God that it is able to "divide asunder soul and spirit." The words in the original are ψυχή and πυευμα, and it is contended that by the former is meant the sentient or animal soul, and by the latter the higher or rational soul. A similar distinction has been traced in the language of the Old Testament Scriptures, where one word is employed to denote the life that is common to man with the inferior animals, הוה, and another word נשמה, to denote that inspiration of the Almighty which giveth him understanding, and makes of him a rational soul. It may be doubted, however, whether this distinction is uniformly observed, either in the Scriptures of the Old or of the New Testament. And it may be better for ns, instead of attempting to define the soul à priori by its essence, to define it rather à posteriori by its operations. This also has been done by Aristotle, in a definition which has been generally adopted. He says, "The soul is that by which we live, feel, or perceive, move and understand." This is a full enumeration of all the energies which Aristotle assigned to the soul, and they are all manifested by the soul as it exists in man. Two of them, however, the energies of growth and motion, are usually treated of by the physiologist, rather than by the psychologist. At the same time, life and movement are not properties of matter; and therefore they were enumerated by Aristotle as the properties of soul—the soul nutritive, and the soul motive. "The animating form of a natural body is neither its organization, nor its figure, nor any other of those inferior forms which make up the system of its visible qualities; but it is the power which, not being that organization, nor that figure, nor those qualities, is yet able to produce, to preserve, and to employ them."—Harris,

SOUL-

Phil. Arrange., p. 279. This is what is now called the principle of life, and the consideration of it belongs to the physiologist—for, although in the human being life and soul are united, it is thought they may still be separate entities. In like manner some philosophers have contended that all movement implies the existence of a soul, and hence it is that the various phenomena of nature have been referred to an anima mundi, or soul of the universe. A modern philosopher of great name (Jouffroy, in his Cours Professé à lu Faculté des Lettres in 1837) enumerated among the energies of the human soul a special faculty of locomotion, and the power of orginating movement or change is ascribed to it when we call it active. The same view is taken by Adolphe Garnier in his Traité des Facultiés de l'ame, iii, tom. 8vo, Par, 1852. Still, life and locomotion are not usually treated of as belonging to the soul, but rather as belonging to the bodies in which they are manifested. Hence it is that Dr. Reid, in his definition of the human soul, does not enumerate the special energies by which we live and move, but calls it that by which we think. "By the mind of a man," says he (Intell. Pow., essay i. ch. 1), "we understand that in him which thinks, remembers, reasons, wills. . . . . We are conscious that we think, and that we have a variety of thoughts of different kinds—such as seeing, hearing, remembering, deliberating, resolving, loving, hating, and many other kinds of thoughtall which we are taught by nature to attribute to one internal principle; and this principle of thought we call the mind or soul of man."\* It will be observed that Dr. Reid uses the word soul as synonymous with mind. And, perhaps, no very clear nor important distinction can be taken between them. The plainest and most common distinction taken in the use of these words is, that in speaking of the mind of man we refer

<sup>\*</sup> Dr. Reid's is the psychological definition. But the soul is something different from the ego, from any of its faculties, and from the sum of them all. Some have placed its essence in thought, as the Cartesians—in sensation, as Locke and Condillac,—or in the will or activity, like Malne de Biran. A cause distinguished from its acts distinguished from its modes or different degrees of activity, is what we eall a force. The soul then is a force, one and identical. It is, as defined by Plato (De Leg., lib. 10), a self-moving force. Understanding this to mean bodily or local motion. Aristotle has argued against this definition.—De Anima, lib. i. 3. But Plato probably meant self-active to be the epithet characteristic of the mind or soul.—κίνησις ἐαυτήν κίνουσα.

SOUL-

more to the various powers which it possesses, or the various operations which it performs: and in speaking of the soul of man we refer rather to the nature and destiny of the human being. Thus we say the immortality of the soul, and the powers of the mind.\* A difference of meaning is more observable in our language between the terms spirit and mind than between soul and mind. Both the latter terms may be and are applied indifferently to the mental principle as living and moving in connection with a bodily organism. But the term spirit properly denotes a being without a body. A being that never had a body is a pure spirit. A human soul when it has left the body is a disembodied spirit. Body is animated matter. Mind or soul is incorporated spirit.

Into these verbal criticisms, however, it is not necessary to enter very minutely, because in psychological inquiries the term *mind* is commonly employed to denote that by which we feel, know, will, and reason—or in one word the principle of thought. We know this inward principle as manifested through a system of bodily organization with which it is united, and by which it is in many ways affected. But "we are taught by nature," says Dr. Reid, "or it is a primitive belief, that the thinking principle is something different from the bodily organism, and when we wish to signalize its peculiar nature and destiny, we call it *soul* or *spirit*."

"Animus, Animus, πνεῦμα and ψυχή are participles. Anima est ab Animus. Animus vero est a Graco ἀνεμος quod dici volunt quasi ἀκεμος, ab ἀΑω sive ἀΛεμι, quod est πνέω; et Latinis a Spirando, Spiritus. Immo et ψυχή est ψύχω quod Hesychius exponit πνέω."—Vossius—quoted from Horne Tooke in Stewart's Philosoph. Essays, essay v.

"Indulsit mundi eonmunis conditor illis
Tantum Animas; nobis Animum quoque."—Juv., Sat. 9, v. 134.

Anima, which is common to man and brutes, is that by which we live, move, and are invigorated; whilst Animus is that which is peculiar to mankind, and by which we reason.

SOUL-

The triple division of man into νοῦς, ψυχή, σῶμα, occurs frequently in ancient authors. Plato, Timeus; Aristotle, Pol. 1. The Hellenist Jews seemed to have used the term πνεῦμα to denote what the Greeks called νοῦς, with an allusion to Gen. ii. 7; Josephus, Ant. Jud., i. cap. 2. Thence in the New Test. we have, 1 Thess. v. 23, πνεῦμα, ψυχή, σῶμα; Heb. iv. 12, and Grotius, Note on Matthew xxvi. 41.—Fitzgerald, Notes on

Aristotle's Ethics, p. 197.

Ψυχή, soul, when considered separately, signifies the principle of life; Novs, mind, the principle of intelligence. Or, according to Plutarch, soul is the cause and beginning of motion, and mind of order and harmony with respect to motion. Together they signify an intelligent soul ("Evrovs ψυχή) which is sometimes called a rational soul (ψυχή λογική). Hence, when the nature of the soul is not in question, the word  $\psi_{\nu\chi\eta}$  is used to express both. Thus in the Phedo the soul (ψυχή) is said sometimes to use the body for the examination of things; at which times, according to Plato, it forms confused and imperfect notions of things, and is involved in error. But, when it examines things by itself, it arrives at what is pure and always existing, and immortal, and uniform, and is free from error. Here the highest operations of νους, "mind," are indisputably attributed to ψυχή, "soul." Aristotle describing Juxn (De Anima, lib. i. cap. 1), says that during anger, confidence, desire, &c., it participates with the body; but that the act of understanding belongs peculiarly to itself."-Morgan, On Trinity of Plato, p. 54.

SOUL OF THE WORLD.—Anima Mundi—q. v.

SPACE (spatium).—" Space, taken in the most general sense, comprehends whatever is extended, and may be measured by the three dimensions, length, breadth, and depth. In this sense it is the same with extension. Now, space, in this large signification, is either occupied by body, or it is not. If it be not, but is void of all matter, and contains nothing, then it is space in the strictest signification of the word, and as it is commonly used in English philosophical language, being the same with what is called a vacuum."—Monboddo, Anc. Metaphys. bk. iv. ch. 2.

Mr. Locke has attempted to show that we acquire the idea of space by sensation, especially by the senses of touch and

SPACE-

sight.—Bk. ii. ch. 4. But according to Dr. Reid, "space is not so properly an object of sense as a necessary concomitant of the objects of sight and touch."—Intell. Pow., essay ii. ch. 19. It is when we see or touch body that we get the idea of space; but the idea is not furnished by sense—it is a conception, à priori, of the reason. Experience furnishes the occasion, but the mind rises to the conception by its native energy. This view has been supported by Cousin, Cours d'Histoire de la Philosophie au xviii. Siecle, 2 tom. 17 leçon; and by Royer Collard, in Jouffroy's Œuvres du Reid, tom. iii. fragmen 4, p. 424; tom. iv. fragmen 9, p. 338.

"In the philosophy of Kant space and time are mere forms of the sensibility. By means of the external sense we represent to ourselves everything as in space; and by the internal sense all is represented in the relationship of time."—Analysis of Kant's Critick of Pure Reason, 8vo, Lond. 1844, p. 9.

According to Kant, space is a subjective condition of the sensibility, the form of all external phenomena; and as the sensibility is necessarily anterior in the subject to all real intuition, it follows that the form of all these phenomena is in the mind à priori. There can, then, be no question about space or extension but in a human or subjective point of view. It may well be said of all things, in so far as they appear existing without us, that they are enclosed in space; but not that space encloses things absolutely, seen or not seen, and by any subject whatsoever. The idea of space has no objective validity, it is real only relatively to phenomena, to things, in so far as they appear out of us; it is purely ideal is so far as things are taken in themselves, and considered independently of the forms of the sensibility.—Willm., Hist. de la Philosoph. Allemande, tom. i. p. 142.

"Space (German, Raum) is a pure intuition which lies at the foundation of all external intuitions, and is represented as an infinitely given quantity. It is the formal condition of all matter, that is, without it, no matter, and consequently no corporeal world, can be thought. Space and time have no transcendental objectivity, that is, they are in themselves non-existing, independent of our intuition-faculty; but they have objectivity in respect of the empirical use, that is, they

#### SPACE—

exist as to all beings that possess such a faculty of intuition as ourselves."—Haywood, Crit. of Pure Reason, p. 603.

"According to Leibnitz, space is nothing but the order of things co-existing, as time is the order of things successive—and he maintained, 'that, supposing the whole system of the visible world to be moved out of the place which it presently occupies, into some other portion of space, beyond the limits of this universe, still it would be in the same space, provided the order and arrangement of the bodies, with respect to one another, was continued the same.' Now, it is true, that bodies placed in any kind of order, must necessarily be in space; but the order in which bodies are placed, and the space in which they are placed, must necessarily be distinct."—Monboddo, Anc. Metaphys., bk. iv. ch. 1; Letters of Clark and Leibnitz.

"1. Space is not pure nothing, for nothing has no capacity; but space has the capacity of receiving body.

"2. It is not an *ens rationis*, for it was occupied by heaven and earth before the birth of man.

"3. It is not an accident inhering in a subject, i.e., body, for body changes its place, but space is not moved with it.

"4. It is not the superficies of one body surrounding another, because superficies is an accident; and as superficies is a quantity it should occupy *space*; but *space* cannot occupy *space*. Besides, the remotest heaven occupies *space*, and has no superficies surrounding it.

"5. It is not the relation or order with reference to certain fixed points, as east, west, north, and south. For if the whole world were round, bodies would change place and not their order, or they may change their order and not their place, if the sky, with the fixed points, were moved by itself.

"6. and 7. It is not body, nor spirit.

"8. It may be said with probability that space cannot be distinguished from the divine immensity, and therefore from God. It is infinite and eternal, which God only is. He is the place of all being, for no being is out of Him. And although different beings are in different places externally, they are all virtually in the divine immensity."—Derodon, Physic., pars 1, ch. 6.

Bardili argued for the reality of time and space from the

SPACE—

fact that the inferior animals perceive or have notions of them. Yet their minds, if they can be said to have minds, are not

subject to the forms or laws of the human mind.

But if space be something to the mind, which has the idea of it, and to the bodies which exist in it, what is it? "Perhaps," says Dr. Reid (ut supra)" we may apply to it what the Peripatetics said of their first matter, that whatever it is, it is potentially only, not actually." This, accordingly, is the view taken of it by a great admirer of the Peripatetic philosophy.

"Space," says Lord Monboddo (Ane. Metaphys., bk. iv. ch. 2), " is but a relative; and it is relative to body, and to body only, and this in three respects,—first, as to its capacity of receiving body; secondly, as to its connecting or limiting body; and lastly, as to its being the distance between bodies that are separated. . . . . Place is space occupied by body. It is different from body as that which contains is different from that which is contained. . . . . Space, then, is place, potentially: and when it is filled with body, then it is place, actually.

Space, as containing all things, was by Philo and others identified with the Infinite. And the text (Acts xvii. 28) which says that "in God we live, and move, and have our being," was interpreted to mean that space is an affection or property of the Deity. Sir Isaac Newton maintained that God by existing constitutes time and space. "Non est duratio vel spatium sed durat et adest, et existendo semper et ubique, spatium et durationem constituit." Clarke maintained that space is an attribute or property of the Infinite Deity. Reid and Stewart, as well as Cousin and Royer Collard, while they regard space as something real and more than a relation, have not positively said what it is.

As space is a necessary conception of the human mind, as it is conceived of as infinite, and as an infinite quality, Dr. Clarke thought that from these views we may argue the existence of an infinite substance, to which this quality belongs. -See his Demonstration of the Being and Attributes of God,

with Butler's Letters to him and the Answers.

Stewart, Act. and Mor. Pow.; Pownall, Intellectual Physics; Brougham, Nat. Theology.

SPECIES (from the old verb, specio, to see) is a word of different signification, in different departments of philosophy.

#### SPECIES-

In Logie, species was defined to be, "Id quod predicatur de pluribus numero differentibus, in quæstione quid est?" And genus was defined to be, "Id quod predicatur de pluribus differentibus specie, in quæstione quid est?" According to Derodon (Log., p. 293), the adequate definition of genus is "Res similes eodem nomine substantivo donatæ, et identificatæ cum omnibus inferioribus diverso nomine substantivo donatis, et proprietate quadam incommunicabili distinctis." And of species, "Res similes eodem nomine substantivo donatæ, et identificatæ eum omnibus inferioribus diverso nomine substantivo donatæ, et identificatæ eum omnibus inferioribus diverso nomine substantivo donatis, et omnes proprietates ita similes habentibus, ut quodlibet possit habere attributa aliorum, nullum tamen habeat actu idem sed tantum simile."

In the process of elassification (q. v.), the first step is the formation of a species. A species is a group of individuals agreeing in some common character, and designated by a common name. When two or more species are brought together in the same way, they are called a genus.

"In Logic, genus and species are relative terms; a conception is called in relation to its superior, species—to its inferior, genus. The summum genus is the last result of the abstracting process, the genus which can never in turn be a species. infima species is the species which cannot become a genus; which can only contain individuals, and not other species. If it have classes as well as individuals under it, it is termed species subalterno. Thus Dog is a subalterno genus in reference to the various species of dogs, but a subaltern species to different kinds of animals. But there can only be one absolute summum genus, whether we call it 'thing,' 'substance,' or 'essence.' And we can scarcely ever ascertain the infima species, because even in a handful of individuals, we cannot say with certainty that there are no distinctions on which a further subdivision into smaller classes might be founded."-Thomson, Outline of Laws of Thought, 2d ed. sec. 27.

In *Mathematics*, the term *species* was used in its primitive sense of *appearance*; and when the form of a figure was given, it was said to be given in *species*.

Algebra, in which letters are used for numbers, was called at one time, the specious notation.

SPECIES-

In Mineralogy, species is determined by perfect identity of

composition; the form goes for nothing.

In the organized kingdoms of nature, on the contrary, species is founded on identity of form and structure, both external and internal. The principal characteristic of species in animals and vegetables, is the 'power to produce beings like themselves, who are also productive. A species may be modified by external influences; and thus give rise to races or varieties; but it never abandons its own proper character to assume another.

In Natural History, species includes only the following conditions; viz., separate origin and distinctness of race, evinced by a constant transmission of some characteristic peculiarity of organization.—Dr. Prichard.

"Species," according to Dr. Morton (author of Crania Americana), "is a primordial organic form." See a descrip-

tion of species in Lyell's Geology, ch. 37.

"By maintaining the unity of the human species (says A. v. Humboldt, Cosmos, vol. i. p. 355, Engl. trans.), we at the same time repel the cheerless assumption of superior and inferior races of men." "This eminent writer appears in the passage quoted to exaggerate the extent of uniformity implied in a common species. It is unquestionable that mankind form one species in the sense of the natural historian; but it does not follow from this fact that there are no essential hereditary differences, both physical and mental, between different varieties and races of men. The analogy of animal species would make it probable that such essential differences do exist; for we see that, although all horses, dogs, oxen, sheep, &c., form respectively one species, yet each species contains varieties or races, which possess certain properties in different degrees,-which are more or less large, active, gentle, intelligent, hardy, and the like. If we are guided by the analogy of animal species, it is as probable that an Englishman should be more intelligent than a negro, as that a greyhound should be more fleet than a mastiff, or an Arabian horse than a Shetland pony."—Sir G. C. Lewis, On Politics, ch. 27, sec. 10.

Species in Perception.

In explaining the process of external perception, or how

#### SPECIES-

we come to the knowledge of things out of and distant from us, it was maintained that these objects send forth species or images of themselves, which, making an impression on the bodily organs, next imprinted themselves on the mind and issued in knowledge.

The species considered as the vicarious representative of the object, was called *intentional*. And as it affected both the intellect and the sense, was distinguished as sensible and *intelligible*.

Species, as sensible, was distinguished as species impressa, as making an impression upon the sense—and species expressa, in consequence of the sense or imagination, from the impression elaborating another species of the object.

Species, as intelligible, was also distinguished into species impressa and species expressa. The species intelligibilis was called impressa, as it determined the faculty to the apprehension of this object, rather than of that. And it was called expressa, as in consequence of the operation of the faculty, knowledge of the object was attained to.

According to some, the *species* as intelligible were congenite, and according to others they were elaborated by the intellect in the presence of the phantasms.

The process of perception is thus described by Tellez (Summa Phil. Arist., Paris 1645, p. 47).

Socrates by his figure, &c., makes an impression upon the eye, and vision follows—then a species is impressed upon the phantasy, phantasma impressum; the phantasy gives the phantasma expressum, the intellectus agens purifies and spiritualizes it, so that it is received by the intellectus patiens, and the knowledge of the object is elicited.

"The philosophy schools teach that for the cause of vision, the thing seen sendeth forth on every side a visible species (in English), a visible show, apparition, or aspect, or a being seen, the receiving of which into the eye is seeing. . . . . Nay, for the cause of understanding also the thing understood sendeth forth an intelligible species, that is, an intelligible being seen, which, coming into the understanding, makes it understood."—Hobbes, Of Man, part i. ch. 1.

For the various forms under which the doctrine of species has been held, see Reid, *Intell. Pow.*, essay ii. ch. 8, with notes by Sir W. Hamilton, and note p.

#### SPECIES—

The doctrine was not universally received during the Middle Ages.

"Scholasticism had maintained that between the exterior bodies, placed before us, and the mind of man, there are images which belong to the exterior bodies, and make more or less a part of them, as the είδωλα of Democritus, images or sensible forms which represent external objects by the conformity which they have with them. So the mind was supposed to be able to know spiritual beings only through the medium of intelligible species. Occam destroyed these chimeras, and maintained that there is nothing real but spiritual or material beings, and the mind of man, which directly conceives them. Gabriel Biel, a pupil of Occam (born at Spire, and died 1495), exhibited with much sagacity and clearness the theory of his master. Oceam renewed, without knowing it, the warfare of Arcesilas against the Stoics; and he is in modern Europe the forerunner of Reid and of the Scotch school."—Cousin, Hist. of Mod. Phil., vol. ii. p. 26.

Mons. Haureau (Exam. de Phil. Scolast., tom. i. p. 416) says of Durandus de St. Pourcain that he not only rejected intelligible species, but that he would not admit sensible species. To feel, to think, said he, are simple acts which result from the commerce of mind with an external object; and this commerce takes place directly without anything intermediate.

SPECIFICATION (The Principle of) is, that beings the most like or homogeneous disagree or are heterogeneous in some respect. It is the principle of variety or difference.

Specification (Process of) "is the counterpart of generalization. In it we begin with the most extensive class, and descend, step by step, till we reach the lowest. In so doing we are thinking out objects, and thinking in attributes. In generalization we think in objects and think out attributes."—Spalding, Log., p. 15.

is, from premisses given or assumed, but considered unquestionable, as the constituted point of observation, to look abroad upon the whole field of intellectual vision, and thence to decide upon the true form and dimension of all which meets the view."—March, Prelim. Essay to Aids to Reflection, p. 13.

# SPECULATION-

"Speculation stands opposed to reflection, a method of thought which has to do with something given, and appropriates the same by continued analysis and synthesis of its elements. If speculative stands thus opposed to reflective thinking, it must necessarily belong to the former not to set out from anything given as its subject, but from determinations which thought finds in itself as the necessary and primary ground of all being as of all thinking. In this sense, all speculative thinking is of an à priori, and all reflective thinking of an à posteriori nature."—Müller, Doctrine of Sin, Introd.

It is that part of philosophy which is neither practical nor experimental. The *speculative* part of philosophy is metaphysics; [that which carries us into a region transcending experience, and which has, therefore, been named transcendental.] The *speculative* part of mathematics is that which has no application to the arts.

SPIRIT.—V. Soul.

SPIRITUALISM (spiritus, spirit) is not any particular system of philosophy, but the doctrine, whether grounded on reason, sentiment, or faith, that there are substances or beings which are not cognizable by the senses, and which do not reveal themselves to us by any of the qualities of matter, and which we therefore call immaterial or spiritual. Materalism denies this. But spiritualism does not deny the existence of matter. Placing itself above materialism, it admits both body and spirit. Hence it is called dualism, as opposed to the denial of the existence of matter. The idealism of Berkeley and Malebranche may be said to reduce material existences to mere phenomena of the mind. Mysticism, whether religious or philosophical, ends with resolving mind and matter into the Divine substance. Mysticism and idealism tend to pantheism, materialism tends to atheism. Spiritualism, grounded upon consciousness, preserves equally God, the human person, and external nature, without confounding them and without isolating the one from the other. -Dict. des Sciences Philosoph.

SPONTANEITY.—[The characteristic of an occasional act, springing from the single and immediate operation of the laws of exercise belonging to a mental power. We have examples

#### SPONTANEITY-

of spontaneity, in the unexpected play of memory, or in the rise of pity at sight of suffering. Spontaneity thus stands contrasted with the uniform play of fixed law in the physical world, and with mental activity which is the result of volition.

—Ed.] Leibnitz (Opera, tom. i. p. 459) explains "spontaneity to mean the true and real dependence of our actions on ourselves." Heineccius calls it "the faculty of directing one's aim to a certain end."—Turnbull, Trans., vol. i. p. 35. It is a self-active causality.

SPONTANEOUS is opposed to reflective. Those operations of mind which go on without any effort or intention on our part are spontaneous. When we exercise a volition, and make an effort of attention to direct our mental energy in any particular way, or towards any particular object, we are said to reflect, or to observe.

standard of Virtue.—Standard is that by which other things are rated or valued. [The standard of Virtue is—
(1) primarily, moral law; (2) proximately, the Divine Will; (3) ultimately, the moral perfection of the Deity.—
Ed.]

A standard is something set up by which to measure the quantity or quality of some other thing. Now rectitude is the foundation of virtue. The standard of virtue is some law or rule by which rectitude can be measured. [It is the law of God, whether discovered by conscience or presented in Revelation.] The will of God, as declared by the constitution and course of nature, or as revealed by His Word, is a standard by which we may measure the amount of rectitude in action or disposition. According as they agree, in a greater or less degree, with the indications of the divine will, in the same proportion are they right, or in accordance with rectitude. The standard of virtue, then, is the will of God, as declared in His Word, or some law or rule deduced from the constitution of nature and the course of providence. The foundation of virtue is the ground or reason on which the law or rule rests.—V. CRITERION.

STATE OF MIND.—[An expression employed to describe each successive form of our experience, however complex.—Ed.] "The term state has, more especially of late years, and principally by Necessitarian philosophers, been applied to all

#### STATE OF MIND-

modifications of mind [indifferently."—Sir. W. Hamilton. "The reason why madness, idiotism, &c., are called states of mind, while its acts and operations are not, is because mankind have always conceived the mind to be passive in the former and active in the latter."—Reid's Correspondence, p. 85.

Such were the views of Dr. Reid. But since his day, a change has passed over the language of Scottish psychology. No change of phraseology, because no change of doctrine, it to be found in the writings of Mr. Stewart. But in those of Dr. Brown the difference is manifest. Instead of speaking of the mind as operating, or as acting, or as energizing, he delights rather to speak of it as exhibiting phenomena, and as passing through, or existing in, different states. This phraseology has been by many accepted and applauded. It is thought that by adopting it, we neither affirm nor deny the activity of the mind, and thus proceed to consider its manifestations, unembarrassed by any questions as to the way in which these manifestations are brought about. But it may be doubted if this phraseology leaves the question, as to the activity of the mind, entire and untouched.

If Dr. Brown had not challenged the common opinion, he would not, probably, have disturbed the language that was previously in common use; although it must be admitted that he was by no means averse to novel phrases. That the mind in some of its manifestations is passive, rather than active, is admitted; and in reference to these, there can be no objection to speak of it as existing in certain states, or passing into these states. But in adopting, to some extent, this phraseology, we must not let go the testimony which is given in favour of the activity of mind, by the use and structure of language. Language is not the invention of philosophers. It is the natural expression of the human mind, and the exponent of those views which are natural to it. Now. the phrase operations of mind, being in common use, indicates a common opinion that mind is naturally active. That opinion may be erroneous, and it is open to philosophers to show, if they can, that it is so. But the observation of Dr. Reid is, that "until it is proved that the mind is not active in thinking, but merely passive, the com-

# STATE OF MIND-

mon language with regard to its operations ought to be used, and ought not to give place to a phraseology invented by philosophers, which implies its being merely passive."

And in another place (Intell. Pow., essay i. ch. 1), he says, "There may be distinctions that have a real foundation, and which may be necessary in philosophy, which are not made in common language, because not necessary in the common business of life. But I believe no instance will be found of a distinction made in all languages, which has not a just foundation in nature."

If any change of phraseology were expedient, the phrase "manifestations of mind" would touch less upon the question of its activity. But in the language of Dr. Reid-"The mind is, from its very nature, a living and active being. Everything we know of it implies life and active energy; and the reason why all its modes of thinking are called its operations is, that in all or in most of them, it is not merely passive, as body is, but is really and properly active. In all ages, and in all languages, ancient and modern, the various modes of thinking have been expressed by words of active signification, such as seeing, hearing, reasoning, willing, and the like. It seems, therefore, to be the natural judgment of mankind, that the mind is active in its various ways of thinking; and for this reason they are called its operations, and are expressed by active verbs." "Surely the mind has something more than a mere receptivity! It is not a mere surface, on which matter may reflect itself as in a mirror; our consciousness testifies that, in comparison with matter, it is active; that it has an original and originating potency."—M'Cosh, Intuitions, p. 25.

STATISTICS.—"The observation, registration, and arrangement of those facts in politics which admit of being reduced to a numerical expression has been, of late years, made the subject of a distinct science, and comprehended under the designation of statistics. Both the name and the separate treatment of the subject were due to Achenwall,\* who died in 1772. Upon the nature and province of the science of statistics, see the

<sup>\*</sup> Godefroy Achenwall was born at Elbingen, in Prussia, in 1719; studied at Jena, Halle, and Leipsic, established himself at Marburg in 1746, and in 1748, where he soon afterwards obtained a chair. He was distinguished as Professor of History and Statisties. But he also published several works on the Law of Nature and of Nations.

# STATISTICS-

Introduction to the Journal of the London Statistical Society vol. i. 1839. This science, it is there remarked, does not discuss causes, nor reason upon probable effects; it seeks only to collect, arrange, and compare, that class of facts which alone (?) can form the basis of correct conclusions with respect to social and political government. . . . . Its peculiarity is that it proceeds wholly by the accumulation and comparison of facts, and does not admit of any kind of speculation. . . . The statist commonly prefers to employ figures and tabular exhibitions."—Sir G. C. Lewis, Method of Observ. in Polit., ch 5, sec. 10.

STOICS (from \$\sigma\tau\alpha

Their philosophy of mind may be judged of by the motto assigned to them—Nihil est in intellectu nisi prius fuerit in sensu. Yet, along with this, they held that the mind had the power of framing general ideas, but these were derived from experience. Zeno compared the hand open to sensation: half closed upon some object to judgment; fully closed upon it to φαντασία καταληπτική, comprehensive judgment, or synthesis of judgment. And when the one hand grasped the other to enable it to hold more firmly, this was universal and definitive synthesis or science. In physics they said all things were made of cause and matter. In morals their maxim was "to live agreeably to nature" [ ὁμολογουμένως τῆ Φύσει ζην.] Mind ought to govern matter. And the great struggle of life was, to lift the soul above the body, and the evils incident to it. Their two great rules were dutyou and ἀπέχου—sustine, abstine.—Dict. des Sciences Philosoph.

"From the Tusculan Questions," says Bentham, "I learnt that pain is no evil. Virtue is of itself sufficient to confer happiness on any man who is disposed to possess it on these terms.

"This was the sort of trash which a set of men used to amuse themselves with talking, while parading backwards and forwards in colonnades, called porches: that is to say, the Stoics, so called from  $\sigma\tau o\acute{\alpha}$ , the Greek name for a porch.

#### STOICS-

In regard to these, the general notion has been, that compared with our contemporaries in the same ranks, they were, generally speaking, a good sort of men; and assuredly, in all times, good sort of men, talking all their lives long nonsense, in an endless variety of shapes, never have been wanting; but that from talking nonsense in this or any other shape, they or their successors have, in any way or degree, been the better, this is what does not follow."—Deontol., vol. i. p. 302.

[Diogenes Laertius, Zeno.] Heinsius (Dan.), Philosoph. Stoica, 4to, Leyd. 1627; Lipsius (Justus), Manuductio ad Stoicam Philosoph., 4to, Antw. 1664; Gataker (Thomas), Dissertatio de Disciplina Stoica, prefixed to his edition of Antoninus, 4to, Camb. 1643; Oxford Essays, 1858.

subject, object, that on which the mind's attention is directed, whether it be something within, or something without. Subjective, pertaining to the mind, as observant or reflective. Objective, pertaining to the thing on which the mind's attention is directed; having validity or reality apart from the mind's contemplation.—Ed.} "We frequently meet," says Dr. Reid, "with a distinction between things in the mind and things external to the mind. The powers, faculties, and operations of the mind, are things in the mind. Everything is said to be in the mind, of which the mind is the subject. . . . Excepting the mind itself and things in the mind, all other things are said to be external."

By the term subject Dr. Reid meant substance, that to which powers belong or in which qualities reside or inhere. The distinction, therefore, which he takes between things in the mind and things external to the mind, is equivalent to that which is expressed among continental writers by the ego and the non ego, or self and not self. The mind and things in the mind constitute the ego. "All other things," says Dr. Reid, "are said to be external." They constitute the non ego.

"In the philosophy of mind, subjective denotes what is to be referred to the thinking subject, the ego; objective, what belongs to the object of thought, the non ego."—Sir W. Hamilton, Discussions, p. 5, note.

"The subject is properly, id in quo; the object, id circa quod.

#### SUBJECT-

Hence, in psychological language, the *subject* absolutely is the mind that knows or thinks, *i.e.*, the mind considered as the *subject* of knowledge or thought—the *object*, that which is known or thought about. The adjectives *subjective* and *objective* are convenient, if not indispensable expressions."—Sir W. Hamilton, *Reid's Works*, p. 221, note.

"All knowledge is a relation, a relation between that which knows (in scholastic language, the *subject* in which knowledge inheres) and that which is known (in scholastic language, the *object* about which knowledge is conversant); and the contents of every act of knowledge are made up of elements, and regulated by laws, proceeding partly from its *object* and partly from its *subject*. Now, philosophy proper is principally and primarily the *science of knowledge*—its first and most important problem being to determine, What can we know? that is, what are the conditions of our knowing, whether these lie in the nature of the *object*, or in the nature of the *subject* of knowledge.

"But philosophy being the science of knowledge; and the science of knowledge supposing, in its most fundamental and thorough-going analysis, the distinction of the subject and object of knowledge; it is evident that to philosophy the subject of knowledge would be by pre-eminence, the subject, and the object of knowledge, the object. It was therefore natural that the object and objective, the subject and subjective, should be employed by philosophers as simple terms, compendiously to denote the grand discrimination, about which philosophy was constantly employed, and which no others could be found so precisely and promptly to express."—Hamilton's Reid, note B.

SUBJECTIVISM is the doctrine of Kant, that all human know-ledge is merely relative; or rather that we cannot prove it to be absolute. According to him, we cannot objectify the subjective; that is, we cannot prove that what appears true to us must appear true to all intelligent beings; or that with different faculties what now appears true to us might not appear true. But to call our knowledge relative is merely calling it human or proportioned to the faculties of a man; just as the knowledge of angels may be called angelic. Our knowledge may be admitted to be relative to our faculties of apprehending it; but that does not make it less certain.—

Reid's Works, by Sir W. Hamilton, p. 513.

**SUBLIME** (The).—" In reflecting on the circumstances by which sublimity in its primitive sense is specifically distinguished, the first thing that strikes us is, that it carries the thoughts in a direction opposite to that in which the great and universal law of terrestrial gravitation operates."—Stewart, *Phil. Essays*, *Essay on the Sublime*.

A sense of grandeur and sublimity has been recognized as one of the reflex senses belonging to man. It is different from the sense of the beautiful, though closely allied to it. Beauty charms, sublimity moves [awes] us, and is often accompanied with a feeling resembling fear, while beauty rather attracts and draws us towards it.

There is a *sublime* in *nature*, as in the ocean or the thunder—in *moral* action, as in deeds of daring and self-denial—and in *art*, as in statuary and painting, by which what is *sublime* in nature and in moral character is represented and idealized.

Kant has analyzed our feelings of sublimity and beauty in his Critique du Judgment; Cousin, Sur le Beau, le Vrai, et le Bon; Burke, On the Sublime and Beautiful; Addison, Spectator, vol. vi. Dr. Parr addressed an Essay on the Sublime to D. Stewart.

subsistential is a substantial mode added to a singular nature, and constituting a suppositum along with it. It means—1. The thing itself, the suppositum; hence we call the three persons of the Trinity three hypostases or subsistences. 2. The mode added to the singular nature to complete its existence; this is the metaphysical sense. 3. The act of existing per se.

"Subsistentia est 'substantiæ completio;' qua earent rerum naturalium partes a reliquis divulsæ. Subsistens dicitur suppositum aut hypostasis. Persona est suppositum ratione præditum." —Hutcheson, Metaphys., pars. 1, cap. 5.

SUBSTANCE is "that which is and abides."—Coleridge, Aids to Reflect., p. 6; [Spinoza's Ethies, Def. bk. i.]

It may be derived from subsistens (ens per se subsistens), that which subsists of or by itself; or from substans (id quod substat), that which lies under qualities—the drozelueror of the Greeks. But in Greek substance is denoted by ovoic—so that which truly is, or essence, seems to be the proper meaning of substance. It is opposed to aecident; of which Aristotle has said (Metaphys., lib. vii.) that you can scarcely predicate of it that it is anything. So also Augustine (De Trinitate,

# SUBSTANCE—

lib. vii. cap. 4) derives substance from subsistendo rather than from substando. "Sicut ab eo quod est esse, appellatur essentia; ita ab eo quod est subsistere, substantiam dicimus." But Locke prefers the derivation from substando. He says (Essay on Hum. Understand., bk. ii. ch. 23), "The idea, then, we have, to which we give the name of substance, being nothing but the supposed but unknown support of these qualities we find existing, which we imagine cannot subsist, sine re substante, without something to support them, we call that support substantia; which, according to the true import of the word, is, in plain English, standing under or upholding."

Dr. Hampden (Bampton Lect. vii. p. 337), has said, "Substance, in its logical and metaphysical sense, is that nature of a thing which may be conceived to remain when every other nature is removed or abstracted from it—the ultimate point in analyzing the complex idea of any object. Accident denotes all those ideas which the analysis excludes as not belonging to the mere being or nature of the object."

Substance has been defined, ens pcr se existens; and accident, ens existens non in se sed in alio.

Our first idea of *substance* is probably derived from the consciousness of *self*—the conviction that, while our sensations, thoughts, and purposes are changing, we continue the same. We see bodies also remaining the same as to quantity or extension, while their colour and figure, their state of motion or of rest, may be changed.

Substances, it has been said, are either primary, that is singular, individual substances; or secondary,\* that is genera and species of substance. Substances have also been divided into complete and incomplete, finite and infinite, &c. But these are rather divisions of being. Substance may, however, be properly divided into matter and spirit, or that which is extended and that which thinks.

Substance (The Principle of) denotes the law of the human mind by which every quality or mode of being is referred to a substance. In everything which we perceive or can imagine as existing, we distinguish two parts, qualities variable and multiplied, and a being one and identical; and these two are so

<sup>\*</sup> Haureau (Phil. Scholast., tom. i. p. 60), says that what has been called second substance is just one of its modes or a species.

# SUBSTANCE-

united that we cannot separate them in our intelligence, nor think of qualities without a *substance*. Memory recalls to us the many modes of our mind; but amidst all these modes we believe ourselves to be the same individual being. So in the world around us the phenomena are continually varying; but we believe that these phenomena are produced by causes which remain, as *substances*, the same. And as we know ourselves to be the causes of our own acts, and to be able to change the modes of our own mind, so we believe the changes of matter to be produced by causes which belong to the *substance* of it. And underlying all causes, whether of finite mind or matter, we conceive of one universal and absolute cause, *one substance*, in itself persistent and upholding all things.

able to comprehend why or how a thing is, the belief of the existence of that thing is not a primary datum of consciousness, but a *subsumption* under the cognition or belief which affords its reason."—Sir W. Hamilton, *Reid's Works*, note A.

To subsume is to place any one cognition under another as belonging to it. In the judgment, "all horses are animals," the conception "horses" is subsumed under that of "animals." The minor proposition is a subsumption under the major when it is placed first. Thus, if one were to say, "No man is wise in all things," and another to respond, "But you are a man," this proposition is a subsumption under the former. And the major being assumed cx concesso, and the minor subsumed as evidence, the conclusion follows, "You are not wise in all things."

succession." By reflecting on the appearance of various ideas one after another in our understanding, we get the notion of succession."—Locke, Essay on Hum. Understand., bk. ii. ch. 14. He traces our notion of duration or time to the same origin; or rather he confounds succession and duration, the measure with the thing measured. According to Cousin and others, the notion of time is logically antecedent and necessary to the notion of succession. Events take place in time, as bodies exist in space. In the philosophy of Kant, time is not an empirical notion, but like space, a form of the sensibility.

SUFFICIENT REASON (Doctrine of).—" Of the principle of the sufficient reason, the following account is given by Leib-

# SUFFICIENT-

nitz, in his controversial correspondence with Dr. Clarke: - "The great foundation of mathematics is the principle of contradiction or identity; that is, that a proposition cannot be true and false at the same time. But, in order to proceed from mathematics to natural philosophy, another principle is requisite (as I have observed in my Theodicaa), I mean. the principle of the sufficient reason; or, in other words, that nothing happens without a reason why it should be so, rather than otherwise. And, accordingly, Archimedes was obliged, in his book De Equilibrio, to take for granted, that if there be a balance, in which everything is alike on both sides, and if equal weights are hung on the two ends of that balance, the whole will be at rest. It is because no reason can be given why one side should weigh down rather than the other. Now by this single principle of the sufficient reason, may be demonstrated the being of a God, and all the other parts of metaphysics or natural theology; and even, in some measure, those physical truths that are independent of mathematics, such as the dynamical principles, or the principles of forces." —See Reid, Act. Pow., essay iv. ch. 9; Hamilton's Discussions, 603.—V. REASON (DETERMINING).

The principle of sufficient reason as a law of thought is stated by logicians thus—"Every judgment we accept must rest upon a sufficient ground or reason." From this law follow such principles as these:—1. Granting the reason, we must grant what follows from it. On this, syllogistic inference depends. 2. If all the consequents are held to be true, the reason must be true. 3. If we reject the consequent we must reject the reason. 4. If we admit the consequent, we do not of necessity admit the reason, as there may be other reasons or causes of the same effect.

Thomson, Outline of Laws of Thought, p. 296. But according to Mr. Mansel, Prolegom. Log., p. 198, "The principle of sufficient reason is no law of thought, but only the statement that every act of thought must be governed by some law or other."

SUGGESTION (suggero, to bear or place under, to prompt).—
[Contribution to thought, either spontaneously from within, or by communication from without.—Ed.]

"It is the received doctrine of philosophers, that our notions

#### SUGGESTION-

of relations can only be got by comparing the related ideas: but it is not by having first the notions of mind and sensation and then comparing them together, that we perceive the one to have the relation of a subject or substratum, and the other that of an act or operation: on the contrary, one of the related things, viz., sensation, suggests to us both the correlate and the relation.

"I beg leave to make use of the word suggestion, because I know not one more proper, to express a power of the mind, which seems entirely to have escaped the notice of philosophers, and to which we owe many of our simple notions which are neither impressions nor ideas, as well as many original principles of belief."—Reid, Enquiry, ch. 2, sec. 7.

To this power Dr. Reid refers our natural judgments or principles of common sense. Mr. Stewart has expressed surprise that Reid should have apologized for introducing a word which had already been employed by Berkeley, to denote those intimations which are the results of experience and habit (Dissert., p. 167, 2d ed.) And Sir. W. Hamilton has shown that in the more extensive sense of Reid the word had been used by Tertullian; who, speaking of the universal belief of the soul's immortality, has said (De Anima, ch. 2), "Natura pleraque suggerunter, quasi de publico sensu quo animam Deus ditare dignatus est."—Reid's Works, p. 3, note.

The word suggestion is much used in the philosophy of Dr Thomas Brown, in a sense nearly the same as that assigned to association by other philosophers. He calls judgment relative suggestion. Hutcheson (Log. Compend., cap. 1) says, "Sensus est internus qui suggerit pracipue intellectiones puras; quae conscientia, aut reflectendi vis dicitur." It is not so properly consciousness or reflection which gives the new ideas, but rather the occasion on which these ideas are suggested. It is when we are conscious and reflect on one thing, some other thing related to it, but not antecedently thought, is suggested.

Locke said, "Simple ideas, the materials of all our knowledge, are suggested and furnished to the mind only by those two ways mentioned above, viz., Sensation and Reflection.— Essay on Hum. Understand., bk. ii. ch. 2, sec. 2. Cumberland

#### SUGGESTION-

had said before him, "Utrobique intelligimus propositiones quasdam immutabilis veritatis. Hujusmodi aliquot veritates a rerum hominumque natura mentibus humanis necessario suggeri, hoe est quod a nobis affirmatur, hoe idem ab adversariis non minus diserte denegatur."—De Legg. Nat., ch. i. sec. 1.

away of one's own life. The Stoics thought it was not wrong to do so, when the pains and inconveniences of our lot exceeded its enjoyments and advantages. But the command, "Thon shalt not kill," forbids suicide as well as homicide. It is contrary to one of the strongest instincts of our nature, that of self-preservation—and at variance with the submission which we owe to God, and the duties incumbent upon us towards our fellow-creatures. All the apologies that can be offered for it are futile.

Aristotle, Ethie., lib. iii. cap. 7, lib. v. cap. 11; Hermann, Disputatio de Aŭróxeigía et philosophice et ex legibus Romanis considerata, 4to, Leips. 1809; Madame de Staël, Reflexions sur le Suicide; Stæudlin, Hist. des Opinions et des Doetrines sur le Suicide, 8vo, Goetting. 1824; Tisset, Manie du Suicide; Adams, On Self-Murder; Donne, Biathanatus.

superstantium rerum, i.e., exclestium et divinarum que supra nos stant, nimis et superfluus timor, Aulus Gellius, Noct. Attic., lib. 10), is not an "excess of religion" (at least in the ordinary sense of the word excess), "as if any one could have too much of true religion, but any misdirection of religious feeling; manifested either in showing religious veneration or regard to objects which deserve none; that is, properly speaking, the worship of false gods; or, in the assignment of such a degree, or such a kind of religious veneration to any object, as that object, though worthy of some reverence, does not deserve; or in the worship of the true God through the medium of improper rites and ceremonies."—Whately, On Bacon, p. 155.

SUPERNATURAL.—"That is supernatural, whatever it be, that is either not in the chain of natural cause and effect, or which acts on the chain of cause and effect in nature, from without the chain."—Bushnell, Nature and the Supernatural.

#### SUPERNATURAL-

"We may speak of whatever is supposed to be beyond the natural, as preternatural. The phrase will apply not only to the Divine action, but to the agency of such beings as ghosts and demons—to all such operations as witchcraft and necromancy. We may reserve the phrase 'supernatural' to the Supreme Being, and to the works performed by Him, and to the objects created by Him beyond the natural sphere, such as angels and the world to come." We would confine the word miracle to those events which were wrought in our world as a sign or proof of God making a supernatural interposition or a revelation to man. We must now view creation as supernatural, but we do not look upon it as miraculous."—M'Cosh, on the Supernatural, pp. 146, 147.

SUPRA-NATURALISM (supra, above; natura, nature) is the doctrine that in nature there are more than physical causes in operation, and that in religion we have the guidance not merely of reason but of revelation. It is thus opposed to Naturalism and to Rationalism.

SYLLOGISM (συλλογισμός, a putting together of judgments, or propositions or reasonings).

This word occurs in the writings of Plato, in the sense of judging or reasoning; but not in the technical sense assigned

to it by Aristotle.

According to Aristotle (*Prior. Analyt.*, lib. i. cap. 1, sec. 7), "a syllogism is a speech (or enunciation) ( $\lambda \acute{o}_{705}$ ) in which certain things (the premises) being supposed, something different from what is supposed (the conclusion) follows of necessity; and this solely in virtue of the suppositions themselves."

"A syllogism is a combination of two judgments necessitating a third judgment as the consequence of their mutual relation."—Mansel, Prolegom. Log., p. 61.

Enler likened the *syllogism* to three concentric circles, of which the first contained the second, which in its turn contained the third. Thus, if A be predicable of all B, and B of all C, it follows necessarily that A is also predicable of C.

In a syllogism, the first two propositions are called the premises; because they are the things premised or put before; they are also called the antecedents: the first of them is called the major and the second the minor. The third proposition

#### SYLLOGISM-

which contains the thing to be proved, is called the conclusion or consequent; and the particle which unites the conclusion with the premises is called the consequentia or consequence.\*

In a syllogism, "the conclusion having two terms, a subject and a predicate, its predicate is called the major term, and its subject the minor term. In order to prove the conclusion, each of its terms is, in the premises, compared with the third term, called the middle term. By this means one of the premises will have for its two terms the major term and the middle term; and this premise is called the major premise, or the major proposition of the syllogism. The other premise must have for its two terms the minor term and the middle term; and it is called the minor proposition. Thus the syllogism consists of three propositions, distinguished by the names of the major, the minor, and the conclusion; and although each of these has two terms, a subject and a predicate, yet there are only three different terms in all. The major term is always the predicate of the conclusion, and is also either the subject or predicate of the major proposition. The minor term is always the subject of the conclusion, and is also either the subject or predicate of the minor proposition. The middle term never enters into the conclusion, but stands in both premises, either in the position of subject or predicate."-Reid, Account of Aristotle's Logic, iii. sec. 2.

SYMBOL.—V. MYTH.

SYMPATHY (συμπάθεια, fellow-feeling).

"Pity and compassion are words appropriated to signify our fellow-feeling with the sorrow of others. Sympathy, though its meaning was, perhaps, originally the same, may now, however, without much impropriety, be made use of to denote our fellow-feeling with any other passion whatever."—Smith, Theory of Mor. Sent., part i. sec. 1.

Sympathy with sorrow or suffering is compassion; sympathy

\* Thus:-

"Every virtue is laudable;
Diligence is a virtue;
Wherefore diligence is laudable.

<sup>&</sup>quot;The two former propositions are the premises or antecedents, the last is the conclusion or consequent, and the particle wherefore is the consequentia or consequence.

#### SYMPATHY—

with joy or prosperity is congratulation.—Holland, Pliny, bk. xx. Proem; Cudworth, Immut. Mor., bk. iii. ch. 1, p. 18.

SYNCATEGOREMATIC.—V. CATEGOREMATIC.

SYNCRETISM (συνκηπισμός, from σύν, together, and κηπίζω, to behave like a Cretan).—" The Cretans are herein very observable, who, being accustomed to frequent skirmishes and fights, as soon as they were over, were reconciled and went together. And this was it which they commonly called a Syneretism."—

Plutarch, Of Brotherly Love.

Philo of Alexandria gave the first example of syncretism, in trying to unite the Oriental philosophy with that of the Greeks. The Gnostics tried the same thing with the doctrines of the Christian religion. About the beginning of the seventeenth century, George Calixtus, a German theologian, attempted to set down in one common creed the belief of the Papists and the Protestants; but succeeded only in irritating both. To him and his partizans the name Syncretist seems to have been first applied.—See Walch's Introduction to Controversies of Lutheran Church. Similar efforts were made to unite the metaphysics of Aristotle with those of Descartes. And the attempts which have frequently been made to reconcile the discoveries of geology with the cosmogony of Moses deserve no name but that of synerctism, in the sense of its being "a mixing together of things which ought to be kept distinct." On the evils of syneretism, see Sewell (Christ. Morals, ch. 9), who quotes as against it the text, Deut. xxii. 9, "Thou shalt not sow thy vineyard with divers seeds," &c.

SYNDERESIS (σύν διαιρέω, to divide, to tear asunder) was used to denote the state of conviction or remorse in which the mind was when comparing what it had done with what it ought to have done.—Aquinas, Summæ Theolog., pars prima, quæst. 79, articulus 12.

SYNEIDESIS (συνείδησις, joint knowledge; from σύν and είδω).

—Conscience, as giving knowledge of an action in reference to the law of right and wrong, was called the Witness who accused or excused. The operations of conscience were represented by the three members of a syllogism; of which the first contained the law, the second the testimony of the witness, and the third the decision of the judge. But con-

#### SYNEIDESIS-

science not only pronounces sentence; it carries its sentence into effect.—V. Synderesis and Synteresis.

SYNTERESIS (συντήρησις, the conservatory; from συντηςίω).—
Conscience, considered as the repository of those rules, or general maxims, which are regarded as first principles in morals, was called by this name among the early Christian moralists, and was spoken of as the law or lawgiver.

SYNTHESIS (σύνθεσις, a putting together, composition) "consists in assuming the causes discovered and established as principles, and by them explaining the phenomena proceeding from them and proving the explanation."—Newton,

Opties.

"Every synthesis which has not started with a complete analysis ends at a result which, in Greek, is called hypothesis; instead of which, if synthesis has been preceded by a sufficient analysis, the synthesis founded upon that analysis leads to a result which in Greek is called system. The legitimacy of every synthesis is directly owing to the exactness of analysis: every system which is merely an hypothesis is a vain system; every synthesis which has not been preceded by analysis is a pure imagination: but at the same time every analysis which does not aspire to a synthesis which may be equal to it, is an analysis which halts on the way. On the one hand, synthesis without analysis gives a false science; on the other hand, analysis without synthesis gives an incomplete science. incomplete science is a hundred times more valuable than a false science; but neither a false science nor an incomplete science is the ideal of science. The ideal of science, the ideal of philosophy, can be realized only by a method which combines the two processes of analysis and synthesis."-Cousin, Hist. Mod. Phil., vol. i. pp. 277, 278.

SYSTEM (σύστημα; from συνίστημι, to place together) is a full and connected view of all the truths of some department of knowledge. An organized body of truth, or truths arranged under one and the same idea, which idea is as the life or soul which assimilates all those truths. System applies not only to our knowledge, but to the objects of our knowledge. Thus we speak of the planetary system, the muscular system, the nervous system. We believe that the order to which we would reduce our ideas has a foundation in the nature of

#### SYSTEM—

things. And it is this belief that encourages us to reduce our knowledge of things into systematic order.

System, Economy, or Constitution.—"A System, Economy, or Constitution, is a one or a whole, made up of several parts, but yet that the several parts even considered as a whole do not complete the idea, unless in the notion of a whole you include the relations and respects which these parts have to each other. Every work, both of nature and of art, is a system; and as every particular thing, both natural and artificial, is for some use or purpose out of and beyond itself, one may add to what has been already brought into the idea of a system, its conduciveness to this one or more ends. Butler, Preface to Sermons.

TABULA RASA (a tablet made smooth).—The ancients were in use to write upon tablets covered with soft wax, on which the writing was traced with the sharp point of the stylus, or iron pen. When the writing had served its purpose, it was effaced by the broad end of the stylus being employed to make the wax smooth. The tablet was then, as at first, tabula rasa, ready to receive any writing which might be put upon it. In opposition to the doctrine of innate ideas (q.v.) the mind of man has been compared to a tabula rasa, or a sheet of white paper—having at first nothing written upon it, but ready to receive what may be inscribed on it by the hand of experience. view is maintained by Hobbes, Locke, and others. On the other hand, Lord Herbert of Cherbury compares the mind to a book all written over within, but the leaves of which are closed, till they are gradually opened by the hand of experience, and the imprisoned truths or ideas set free. Leibnitz, speaking of the difference between Locke and him, says:-"The question between us is whether the soul in itself is entirely empty, like a tablet upon which nothing has been written (tabula rasa), according to Aristotle (De Anima, lib. iii. cap. 4, sec. 14) and the author of the Essay on Hum. Under. (bk. ii. ch. 1, sec. 2); and whether all that is there traced comes wholly from the senses and experience; or whether the soul originally contains the principles of several

# TABULA RASA-

notions and doctrines, which the external objects only awaken upon occasions, as I believe with Plato." Professor Sedgwick, instead of likening the mind to a sheet of white paper, would rather liken it to what in the art of dyeing is called a "prepared blank," that is, a piece of cloth so prepared by mordaunts and other appliances, that when dipped into the dyeing vat it takes on the colours intended, and comes out according to an expected pattern.

TACT.—"By tact we mean an inferior degree of talent—a skill, or adroitness in adapting words or deeds to circumstances, involving, of course, a quick perception of the propriety of circumstances. It is also applied to a certain degree of mechanical skill."—Moffat, Study of Æsthetics, p. 206.

TALENT.—"By talent, in its distinctive meaning, we understand the power of acquiring and adroitly disposing of the materials of human knowledge, and products of invention in their already existing forms, without the infusion of any new enlivening spirit. It looks no farther than the attainment of certain practical ends, which experience has proved attainable, and the dexterous use of such means as experience has proved to be efficient.

"Talent values effort in the light of practical utility; genius always for its own sake, labours for the love of labour. Talent may be acquired. . . . . Genius always belongs to the individual character, and may be cultivated, but cannot be acquired."—Moffat, Study of Æsthetics, p. 204.

"Talent describes power of acquisition, excellence of memory; genius describes power of representation, excellency of fancy; intellect describes power of inference, excellence of reason."—Taylor, Synonyms.

"Talent lying in the understanding is often inherited; genius being the action of reason and imagination, rarely, or never."—S. T. Coleridge.

# TASTE (POWERS, OR PRINCIPLES OF).-

"His tasteful mind enjoys
Alike the complicated charms, which glow
Thro' the wide landscape."—Cowper, Power of Harmony, bk. ii.

"That power of the mind by which we are capable of discerning and relishing the beauties of nature, and whatever is excellent in the fine arts, is called *Taste*. . . . Like the

#### TASTE-

taste of the palate, it relishes some things, is disgusted with others; with regard to many, is indifferent or dubious; and is considerably influenced by habit, by associations, and by

opinion. . . . .

"By the objects of Taste, I mean those qualties and attributes of things which are, by nature, adapted to please a good taste. Mr Addison (Spectator, vol. vi.) and Dr. Akenside (Pleasures of Imagination) after him, has reduced them to three—to wit, Novelty, Grandeur, and Beauty."—Reid, Intell. Pow., essay viii. ch. 1 and 2.

The best definition of Taste was given by the editor of Spencer (Mr. Hughes), when he called it a kind of extempore judgment. Burke explained it to be an instinct which immediately awakes the emotions of pleasure or dislike. Akenside is clear as he is poetical on the question:—

"What, then is Taste but those internal powers,
Active, and strong, and feelingly alive
To each fine impulse? a discerning sense
Of decent and sublime, with quick disgust
From things deformed, or disarranged, or gross,
In species? This, nor gems, nor stores of gold,
Nor purple state, nor culture, can bestow,
But God alone, when first his sacred hand
Imprints the secret bias of the soul."

Pleasures of Imagin., bk. iii. 1. 523.

"We may consider Taste, therefore, to be a settled habit of discerning faults and excellencies in a moment—the mind's independent expression of approval or aversion. It is that faculty by which we discover and enjoy the beautiful, the picturesque, and the sublime in literature, art, and nature."—Pleasures, &c., of Literature, 12mo, London, 1851, pp. 55, 56.

The objects of Taste have also been classed as the Beautiful, the Sublime, and the Picturesque. The question is whether these objects possess certain inherent qualities which may be so called, or whether they awaken pleasing emotions by suggesting or recalling certain pleasing feelings formerly experienced in connection or association with these objects. The latter view has been maintained by Mr. Alison in his Essay on Taste, and by Lord Jeffrey in the article "Beauty" in the Encyclopædia Britannica.

Lord Jeffrey has said—"It appears to us, then, that objects are sublime and beautiful—first, when they are the natural

# TASTE—

signs and perpetual concomitants of pleasurable sensations, as the sound of thunder, or laughter, or, at any rate, of some lively feeling or emotion in ourselves, or in some other sentient beings; or secondly, when they are the arbitrary or accidental concomitants of such feelings, as ideas of female beauty; or thirdly, when they bear some analogy or fancied resemblance to things with which these emotions are necessarily connected." All poetry is founded on this last—as silence and tranquillity—gradual ascent and ambition—gradual descent and decay.

Mr. Stewart has observed that "association of ideas can never account for a new notion or a pleasure essentially different from all others."—*Elements*, ch. 5, part ii. p. 364, 4to.

Gerard, Essay on Taste; Sir Joshua Reynolds, Discourses before Royal Society; Burke, On Sublime and Beautiful; Payne Knight, Enquiry into Principles of Taste; Hume, Essay on Standard of Taste; Brown, Lectures, 77; Stewart, Philosoph. Essays, part ii. Relative to Taste; Sir T. L. Dick, Essay on Taste, prefixed to Price on the Picturesque, 8vo, 1842.—V. ÆSTHETICS.

TELEOLOGY (τέλος an end; λόγος, discourse) is the doctrine of Final Causes, or Ends. It does not constitute a particular department of philosophy; as the end or perfection of every being belongs to the consideration of that branch of philosophy in which it is included. But teleology is the philosophical consideration of final causes generally.

TEMPERAMENT (tempero, to moderate, to season.—[Prevailing bias of disposition, whether natural or acquired.—Ed.] "There are only two species of temperament. The four well-known varieties, and the millions which are less known, are merely modifications of two species, and combinations of their modifications. These are the active and the passive forms; and every other variety may be conveniently arranged under them."\*

"As character comprises the entire sphere of the educated will, so temperament is nothing else than the sum of our natural

<sup>\*</sup> Layater, Zimmerman, and Von Hildebrandt adopt a similar elassification. The author of the treatise on "Diet," included among the works of Hippocrates, takes the same view of temperaments; as likewise the Brunonian school, which maintained two antagonist, sthenic and asthenic, states.

#### TEMPERAMENT—

inclinations and tendencies. Inclination is the material of the will, developing itself, when controlled, into character, and when controlling, into passions. Temperament is, therefore, the root of our passions; and the latter, like the former, may be distinguished into two principal classes. Intelligent psychologists and physicians have always recognized this fact; the former dividing temperaments into active and passive, the latter classifying the passions as exciting and depressing.

"We would apply the same statement to the affections or emotions. The temperament commonly denominated sanguine or choleric is the same as our active species; and that known as the phlegmatic, or inclancholy, is the same as our passive one."—Feuchtersleben, Dietetics of the Soul, 12mo, Lon. 1852, p. 85.

Bodily constitutions, as affecting the prevailing bias of the mind, have been called temperaments; and have been distinguished into the sanguine, the choleric, the melancholic, and the phlegmatic. To these has been added another, called the nervous temperament. According as the bodily constitution of individuals can be characterized by one or other of these epithets, a corresponding difference will be found in the general state or disposition of the mind; and there will be a bias, or tendency to be moved by certain principles of action rather than by others.

We speak of mind as having a constitution, containing certain primary elements; and, according as these elements are combined and balanced, there may be differences in the constitution of individual minds, just as there are differences of bodily temperaments; and these differences may give rise to a disposition or bias, in the one case, more directly than in the other. According as intellect, or sensitivity, or will, prevails in any individual mind, there will be a correspondent bias resulting.

But it is in reference to original differences in the *Primary desires*, that differences of *disposition* are most observable, Any *desire*, when powerful, draws over the other tendencies of the mind to its side; gives a colour to the whole character of the man, and manifests its influence throughout all his temper and conduct. His thoughts run in a particular channel, without his being sensible that they do so, except by the

# TEMPERAMENT-

result. There is an under-current of feeling, flowing continually within him, which only manifests itself by the direction in which it carries him. This constitutes his temper.\* Disposition is the sum of a man's desires and feelings.

In the works of Galen (tom. iv. Leips. 1822), is an essay to show, Quod anima mores corporis temperamenta seguuntur.

On Temperaments, see Paulus Œgineta, lib. i. sec. 60, translated by Dr Adams, vol. i. p. 84.

See also Feuchtersleben, Medical Psychology.

TEMPERANCE (temperantia) is moderation as to pleasure. Aristotle (Ethie., lib. iii. cap 10) confined it chiefly to the pleasures of touch, and of taste in a slight degree. Hence, perhaps, Popish writers in treating of the vices of intemperance or luxury, dwell much on those connected with the senses of touch and taste. By Cicero the Latin word temperantia was used to denote the duty of self-government in general. Temperantia est quæ ut in rebus expetendis aut fugiendis rationem sequamur monet.

Temperance was enumerated as one of the four cardinal virtues. It may be manifested in the government and regulation of all our natural appetites, desires, passions, and affections, and may thus give birth to many virtues, and restrain from many vices. As distinguished from fortitude, it may be said to consist in guarding against the temptations to pleasure and self-indulgence; while fortitude consists in bearing up against the evils and dangers of human life.

TENDENCY (tendo, to stretch towards).—"He freely moves and acts according to his most natural tendence and inclination."—Scott, Christ. Life, part i. ch. 1.

"But if at first the appetites and necessities, and tendencies of the body, did tempt the soul, much more will this be done when the body is miserable and afflicted."—Taylor, Of Repent., ch. 7, sec. 1.—V. INCLINATION.

TERM (δρος, terminus, a limit).—A term is an act of apprehension expressed in language; also the subject or predicate of a proposition. "I call that a term into which a proposition is resolved, as for instance, the predicate and

<sup>\*</sup> The balance of our animal principles, I think, constitutes what we call a man's natural temper.—Reid, Act. Pow., essay iii. part il. ch. 84

#### TERM—

that of which it is predicated."—Arist., Prior. Analyt., lib. i. cap. 1.

"As lines terminate a plane and constitute figure, so its terms are the limits of a proposition. A proposition consists of two terms; that which is spoken of is called the subject; that which is said of it the predicate; and these are called the terms (or extremes), because logically the subject is placed first and the predicate last. In the middle is the copula, which indicates the act of judgment, as by it the predicate is affirmed or denied, of the subject."—Whately.

Term (An Absolute or Non-Relative), one that is considered by itself, and conveys no idea of relation to anything of which it is a part, or to any other part distinguished from it. Absolute terms are also named non-connotative, as merely denoting an object without implying any attribute of that object; as "Paris," "Romulus."

Term (An Abstract) denotes the quality of a being, without regard to the subject in which it is; as "justice," "wisdom." Abstract terms are nouns substantive.

Term (A Common), such as stands for several individuals, which are called its *significates*; as "man," "city." Such terms, and such only can be affirmatively predicated of several others, and they are therefore called *predicables*.

Term (A Complex) is a proposition.

Term (A Concrete) denotes the quality of a being, and either expresses, or must be referred to, some subject in which it is; as "fool," "philosopher," "high," "wise." Concrete terms are usually, but not always, nouns adjective.

Terms (Contrary) come both under some one class, but are the most different of all that belong to that class; as "wise" and "foolish," both coming under the class of mental qualities. There are some objects to which neither of such terms is applicable; a stone is neither wise nor foolish.

Term (A Definite), one which marks out an object or class of beings; as "Cæsar," "corporeal." Positive terms are definite.

Term (An Indefinite), one which does not mark out, but only excludes an object; as, "not Casar," "incorporeal." Privative and negative terms are called indefinite.

Term (A Negative) denotes that the positive view could not be taken of the object; it affirms the absence of a thing from

#### TERM\_

some subject in which it could not be present; as, "a dumb statue" (you would not say "a speaking statute"). The same term may be negative, positive, or privative, as it is viewed with relation to contrary ideas. Thus "immortal" is privative or negative viewed with relation to death, and positive viewed with relation to life.

Terms (Opposite), express two views which cannot be taken of one single object at the same time; as "white and black."

Term (A Positive) denotes a certain view of an object, as being actually taken of it; as "speech," "a man speaking."

Term (A Privative) denotes that the positive view might conceivably be taken of the object, but is not; "dumbness," "a

man silent" (you might say, "a man speaking").
Term (A Relative), that which expresses an object viewed in relation to the whole, or to another part of a more complex object of thought; as "half" and "whole," "master and servant." Such nouns are called correlative to each other: nor can one of them be mentioned without a notion of the other being raised in the mind.

Term (A Simple) expresses a completed act of apprehension, but no more; and may be used alone either as the subject or predicate of a proposition. "Virtue is its own reward." Virtue is a simple term, and its own reward is also a simple term, though made up of more words than one.

Term (A Singular), such as stands for an individual; as "Socrates," "London," "this man," "that city." Such terms cannot be predicated affirmatively of anything but themselves.

TERMINISTS.—V. NOMINALISM.

TESTIMONY "is the declaration of one who professes to know the truth of that which he affirms."

"The difficulty is, when testimonies contradict common experience, and the reports of history and witnesses clash with the ordinary course of nature, or with one another."-Locke, Essay on Hum. Understand., bk. iv. ch. 16.

If testimony were not a source of evidence, we must lose all benefit of the experience and observation of others. Much of human knowledge rests on the authority of testimony.

According to Dr. Reid, the validity of this authority is resolvable into the constitution of the human mind. He maintains (Inquiry, ch. 6, sec. 24) that we have a natural

#### TESTIMONY-

principle of veracity, which has its counterpart in a natural principle of credulity—that is, while we are naturally disposed to speak the truth, we are naturally disposed to believe what is spoken by others.

But, says Mr. Locke (Essay on Hum. Understand., bk. iv. ch. 15, 16), "Testimony may be fallacious. He who declares a thing—1. May be mistaken, or imposed upon. 2. He may be an impostor, and intend to deceive."

The evidence of testimony is, therefore, only probable, and

requires to be carefully examined.

The nature of the thing testified to—whether it be a matter of science or of common life—the character of the person testifying—whether the *testimony* be that of one or of many—whether it be given voluntarily or compulsorily, hastily or deliberately, are some of the circumstances to be attended to.

Testimony may be oral or written. The coin, the monument, and other material proofs have also been called testimony.

So that testimony includes tradition and history.

Mr. Hume maintained that no amount of testimony can be sufficient to establish the truth of a miracle. See reply to him by Dr. Adams,\* in his Essay on Miracles, and Dr. Campbell on Miracles, and Dr. Donglas on Miracles.

It was maintained by Craig, a celebrated English geometrician, and by Petersen, that the value of testimony decreases by the lapse of time. And Laplace, in some measure, favoured this view. But if the matter of fact be well authenticated in the first instance, lapse of time and continued belief in it may add to the validity of the evidence.

"Testimony is like an arrow shot from a long bow; the force of it depends on the strength of the hand that draws it. Argument is like an arrow from a cross bow, which has equal

force though shot by a child."—Bacon.

THEISM (Θεός, God).—[The theory of the universe which regards an absolute Being, infinite in intelligence, and perfect in moral goodness, as the author of all things.—Ed.] It is

<sup>\* &</sup>quot;Hume told Caddell the bookseller, that he had a great desire to be introduced to as many of the persons who had written against hlm as could be collected; and requested Caddell to bring him and them together. Accordingly, Dr. Douglas, Dr. Adams, &c., were invited by Caddell to dine at his house in order to meet Hume. They came; and Dr. Price, who was one of the party, assured me that they were all delighted with David."—Rogers's Table Talk.

#### THEISM-

opposed to atheism. It is not absolutely opposed, by its derivation [though essentially opposed as a theory of the universe], to Pantheism, or the belief that the universe is God; nor to Polytheism, or the belief that there are many gods; nor to Ditheism, or the belief that there are two divine principles, one of good and another of evil. Usage, penes quem est arbitrium et norma loquendi, has restricted this word to the belief in one intelligent and free spirit, separate from his works. "To believe that everything is governed, ordered, or regulated for the best, by a designing principle or mind, necessarily good and permanent, is to be a perfect Theist."—Shaftesbury, Inquiry, bk. i. part i. sec. 2.

"These are they who are strictly and properly called *Theists*, who affirm that a perfectly conscious, understanding being, or mind, existing from eternity, was the cause of all other things; and they, on the contrary, who derive all things from senseless matter, as the first original, and deny that there is any conscious, understanding being, self-existent or unmade, are those that are properly called *Atheists*."—Cud-

worth, Intell. Syst., bk. i. ch. 4, sec. 4.

"Though, in a strict and proper sense, they be only Theists who acknowledge one God perfectly omnipotent, the sole original of all things, and as well the cause of matter as of anything else; yet it seems reasonable that such consideration should be had of the infirmity of human understandings, as to extend the word further, that it may comprehend within it those also who assert one intellectual self-existent from eternity, the framer and governor of the whole world, though not the creator of the matter; and that none should be condemned for absolute Atheists merely because they hold eternal uncreated matter, unless they also deny an eternal unmade mind, ruling over the matter, and so make senseless matter the sole original of all things."—Ibid, sec. 7.

Theist and Deist both signify simply one who believes in God; and about the beginning of last century both were employed to denote one who believes in God independently of revelation. "Averse as I am to the cause of Theism or name of Deist, when taken in a sense exclusive of revelation, I consider still that, in strictness, the root of all is Theism; and that to be a settled Christian, it is necessary to be first

#### THEISM-

of all a good Theist."—Shaftesbury, The Moralists, part i. sec. 2. But from about the time of Shaftesbury, the term Deist has generally been applied to such as are indifferent or hostile to the claims of revelation. Balguy's First Letter to a Deist, was against Lord Shaftesbury. His Second Letter to a Diest was against Tindal. All the Deistical writers noticed by Leland were unfriendly to revelation.

"The words Deist and Theist are, strictly speaking, perhaps synonymons; but yet it is generally to be observed that the former is used in a bad, and the latter in a good sense. Custom has appropriated the term Deist to the enemies of revelation and of Christianity in particular; while the word Theist is considered applicable to all who believe in one God."

-Irons, On Final Causes, App. p. 207.

"Theistæ generatim voeantur, qui Deum esse tenent, sive reete sive prave eæteroquin de Deo sentiant. Deistæ voeabantur præsertim sæeulo proxime elapso philosophi, qui Deum quidem esse affirmabant, providentiam vero, revelationem, miraeula, uno verbo, quidquid supernaturale andit, tollebant."—Ubaghs, Theodieeæ Elementa, p. 11.

THEOCRACY (Θεός, God; κράτος, rule).—Government under

the Mosaic dispensation is called theoraey.

"It will easily appear," says Lowman (On Civil Government of the Hebrews, ch. 7), "that the general union of the tribes as one body may be conceived after this manner—that the congregation of Israel, or the whole people enacted by themselves or their representatives; that the great council advised, consulted, proposed; that the judge presided in their councils, and had the chief hand in executing what was resolved in them; and that Jehovah, by the oracle, was to assent to and approve what was resolved, and anthorize the execution of it in matters of the greatest importance to the whole state, so that the general union of the whole nation may not improperly be thus expressed."

THEODICY (Θεός, God; δίκη, a pleading or justification), a vindication of the ways of God.—This word was employed by Leibnitz, who in his Essais de Theodieée, sur la bonté de Dieu, la liberté de l'homme et l'origine du mal, published in 1710, maintained that the existence of moral evil has its origin in the free will of the creature, while metaphysical evil is nothing

# THEODICY-

but the limitation which is involved in the essence of finite beings, and that out of this both physical and moral evil naturally flow. But these finite beings are designed to attain the utmost felicity they are capable of enjoying, while each, as a part, contributes to the perfection of the whole, which, of the many worlds that were possible, is the very best. On this account it has been called the theory of optimism.

In Manuals of Philosophy the term theodicy is applied to that part which treats of the being, perfections, and government

of God, and the immortality of the soul.

In the Manuel de Philosophie, a l'usage des Colleges, 8vo. Paris, 1846, Theodicee, which is written by Emille Saisset, is called rational theology, or the theology of reason, independent of revelation. "It proposes to establish the existence of a being infinitely perfect, and to determine his attributes and essential relations to the world." It treats of the existence, attributes, and providence of God, and the immortality of the soul-which were formerly included under metaphysics.

According to Kant, the objections which a theodicy should meet are-1. The existence of moral evil, as contrary to the holiness of God. 2. Of physical evil, as contrary to his goodness. 3. The disproportion between the crimes and the punishments of this life as repugnant to his justice. He approves of the vindication adopted by Job against his friends, founded on our imperfect knowledge of God's ways.

"When the Jewish mind began to philosophize, and endeavoured to produce dialectic proofs, its theodicean philosophy, or justification of God, stopped, in the Book of Job, at the avowal of the incomprehensibility of the destinies of

mankind."—Bunsen, Hippolytus, vol. ii. p. 7.

Butler, Analogy, part i. ch. 7, treats of the government of God; considered as a scheme or constitution imperfectly

comprehended, part ii. ch. 4.

THEOGONY (Θεός, God; γονή, generation) is that part of Pagan theology which treats of the genealogy and filiation of their deities. It is the title of a celebrated Greek poem by Hesiod, which has been commented on by M. J. D. Guigniaut (De la Theogonie d'Hesiode, Paris, 1835). The Works and Days, and Theogony of Hesiod were translated from the Greek, with remarks by Thomas Cooke, 2 vols. 4to, Lond. 1728.

THEOLOGY (Θεός, God; λόγος, discourse).—" Theology, what is it but the science of things divine?"—Hooker, Eeeles. Pol., bk. iii. sec. 8.

"I mean theology, which, containing the knowledge of God and his creatures, our duty to Him and to our fellow-creatures, and a view of our present and future state, is the comprehension of all other knowledge directed to its true end, i.e., the honour and veneration of the Creator, and the happiness of mankind."—Locke, On the Cond. of the Understand., sec. 22.

The word theology as now used, without any qualifying epithet, denotes that knowledge of God and of our duty to him which we derive from express revelation. In this restricted sense it is opposed to philosophy, and is divided into speculative or dogmatic-and moral or practical, according as it is occupied with the doctrines or the precepts which have been revealed for our belief and guidance. But the Greeks gave the name of (θεολόγοι) to those who, like Hesiod and Orpheus, with no higher inspiration than that of the poet, sang of the nature of the gods and the origin of all things. Aristotle (Metaphys., lib. xi. cap. 6) said that of the three speculative sciences, physics, mathematics, and theology-the last was the highest, as treating of the most elevated of beings. Among the Romans, from the time of Numa Pompilius to that of the emperors, the knowledge and worship of the gods was made subservient to the interests of the state. So that, according to Augustin (De Civitate, lib. vi. cap. 1), there were three kinds of theology—the poetical, or that of the poets—the physical, or that of the philosophers—and the political, or that of the legislator.

Among the Greeks and Romans, there being no divine revelation, the distinction between faith and reason was not taken. Christians were long unwilling to admit that any satisfactory knowledge of God and his attributes, and of the relations between Him and his creatures, could be had independently of revelation. And it was not till after Descartes that the distinction of theology, as natural, and positive or revealed, was commonly taken. The distinction is rather obscured in the Essais de Theodieée of Leibnitz, but clearly expressed by Wolf in the title of his work, Theologia Naturalis Methodo Scientifica Pertraetata, 2 vols. 4to, Frankfort and Leipzig, 1736–37. He thinks it is demonstrative, and calls it

## THEOLOGY—

(Prolegom., sec. 4) "The science which has for its object the existence of God and his attributes, and the consequences of these attributes in relation to other beings, with the refutation of all errors contrary to the true idea of God; in short, all that is now commonly included under natural theology or theodicy, or both."

Natural Theology confines itself exclusively to that know-ledge of God which the light of nature furnishes, and does not intermeddle with the discoveries or the doctrines of positive or revealed theology. It prosecutes its inquiries by the unassisted strength of reason within its own sphere. But rational theology carries the torch or light of reason into the domain of revelation. It criticizes and compares texts—analyzes doctrines—examines traditions—and brings all the instruments of philosophy to bear upon things divine and spiritual, in order to reduce them to harmony with things human and rational.

**THEOPATHY** ( $\Theta_{\xi 0 \xi}$ , Deity;  $\pi \acute{\alpha} \theta_{0 \xi}$ , suffering or feeling).—A word used by Dr. Hartley as synonymous with *piety*, or a sense of Deity.

THEORY (θεωςία, contemplation, speculation), [a rationalized explanation of facts.]—Theory and theoretical are properly opposed to practice and practical. Theory is mere knowledge; practice is the application of it. Though distinct they are dependent, and there is no opposition between them. Theory is the knowledge of the principles by which practice accomplishes its end. Hypothetical and theoretical are sometimes used as synonymous with conjectural. But this is unphilosophical in so far as theoretical is concerned. Theory always implies knowledge—knowledge of a thing in its principles or causes.

"Theory is a general collection of the inferences drawn from facts and compressed into principles."—Parr, Sequel to a Printed Paper.

"With Plato, θεωζεῖν is applied to a deep contemplation of the truth. By Aristotle it is always opposed to πράττειν, and to ποιεῖν, so that he makes philosophy theoretical, practical, and artistical. The Latins and Boethius rendered θεωζεῖν by speculari. With us it means a learned discourse of philosophers of speculative use."—Trendelenburg, Elementa Log. Arist., p. 76.

### THEORY-

"Theory denotes the most general laws to which certain facts can be reduced."—Mackintosh, *Prel. Diss.*, p. 61, Whewell's ed.

"Theory and hypothesis may be distinguished thus:—A hypothesis is a guess or supposition, made concerning the cause of some particular fact, with the view of trying experiments or making observations to discover the truth. A theory is a complete system of suppositions put together for the purpose of explaining all the facts that belong to some one science. For example, astronomers have suggested many hypothesis, in order to account for the luminous stream which follows comets. They have also formed many theories of the heavens; or in other words, complete explanations of all the appearances of the heavenly bodies and their movements. When a theory has been generally received by men of science, it is called a system; as the Ptolemaic system; the Copernican system; the Newtonian system."—Taylor, Elements of Thought.

THEOSOPHISM or THEOSOPHY (Θεός, God; σοφία, knowledge).

"The *Theosophists*, neither contented with the natural light of human reason, nor with the simple doctrines of Scripture understood in their literal sense, have recourse to an internal supernatural light superior to all other illuminations, from which they profess to derive a mysterious and divine philosophy manifested only to the chosen favourites of heaven."—Enfield, *Hist. of Phil.*, vol. ii.

See Tholuck (F. A. D.), Theosophia Persarum Pantheistica,

8vo, Berlin, 1821—App. 1838.

Theosophia seems at one time to have been used as synonymous with theologia. Thus in John Major's Commentary on the First Book of the Sentences, published in 1510, Mr. David Cranston is styled In Sacra Theosophia Baccalaureus.

The theosophists are a school of philosophers who would mix enthusiasm with observation, alchemy with theology, metaphysics with medicine, and clothe the whole with a form of mystery and inspiration. It began with Paracelsus at the opening of the sixteenth century, and has survived in Saint Martin to the end of the eighteenth. Paracelsus, Jacob Boeham, and Saint Martin, may be called popular; while Cornelius Agrippa, Valentine Weigelius, Robert Fludd, and Van Helmont, are more philosophical in their doctrines.

# THEOSOPHISM or THEOSOPHY—

The Rev. Will. Law was also a theosophist. But they all hold different doctrines; so that they cannot be reduced to a system.

"The theosophist is one who gives you a theory of God, or of the works of God, which has not reason, but an inspiration of his own for its basis."—Vaughan, Hours with Mystics, vol. i. p. 45.

"Both the politics and the theosophy of Coleridge were at the mercy of a discursive genius, intellectually bold, educationally timid, which, anxious, or rather willing, to bring conviction and speculation together, mooting all points as it went, and throwing the subtlest glancing lights on many, ended in satisfying nobody, and concluding nothing."—Hunt, Imagination and Fancy, 12mo, 1844, p. 276.

THESIS (θέσις, from τίθημι, to lay down) is a position or proposition, the truth of which is not plain from the terms, but requires evidence, or explanation, or proof. In the schools it was especially applied to those propositions in theology, philosophy, law, and medicine, which the candidates for degrees were required to defend.

THOUGHT AND THINKING "are used in a more, and in a less restricted signification. In the former meaning they are limited to the *discursive* energies alone; in the latter, they are co-extensive with consciousness."—Sir W. Hamilton, *Reid's Works*, p. 222, note.

Thinking is employed by Sir W. Hamilton (Discussions, &c. App. i. p. 578) as comprehending all our cognitive

energies.

By Descartes, cogitatio, pensée, is used to denote or comprehend "all that in us of which we are immediately conscious. Thus all the operations of the will, of the imagination and senses, are thoughts."—Resp. ad Sec. Obj., p. 85, ed. 1663. Again, in reply to the question, What is a thing which thinks? he says, "It is a thing which doubts, understands, conceives, affirms, desires, wills, and does not will, which imagines also, and feels."—Medit. ii. p. 11.

"Thought proper, as distinguished from other facts of consciousness, may be adequately described as the act of knowing or judging of things by means of concepts."—Mansel, Prolegom. Log., p. 22.

## THOUGHT-

Thought is the act of the mind in comparing the objects of knowledge. The simple act of perception by which we recognize an external object, such as a stone, is the act of knowing; but if the stone be compared with other objects around, or if the different properties of the stone be contrasted, such as its length and its breadth, this is an exercise of thought. The consciousness of our own acts of mind is knowledge; the comparison of different mental acts or states is thought.—Calderwood, Phil. of Infin., 2d ed. p. 253.

TIME (tempus).—Continuation of existence is duration; duration

unlimited is eternity; duration limited is time.

By Aristotle, time was defined to be "the measure of motion, secundum prius et posterius. We get the idea of time on the occasion when we observe first and last, that is succession. Duration without succession would be timeless, immeasurable. But how are we to fix what is first and last in the motion of any body? By men in all ages the motions of the heavenly bodies have been made the measure of duration. So that the full definition of time is—'It is the measure of the duration of things that exist in succession, by the motion of the heavenly bodies.'"—Monboddo, Aneient Metaphys., bk.iv.ch.1.

"As our conception of space originates in that of body, and our conception of motion in that of space, so our conception of time originates in that of motion; and particularly in those regular and equable motions carried on in the heavens, the parts of which, from their perfect similarity to each other, are correct measures of the continuous and successive quantity called time, with which they are conceived to co-exist. Time, therefore, may be defined the perceived number of successive movements; for as number ascertains the greater or lesser quantity of things numbered, so time ascertains the greater or lesser quantity of motion performed."—Gillies, Analysis of Aristotle, ch. 2.

"Confiteor tibi, Domine, me nescire adhuc quid sit tempus."

—Augustine.

According to Mr. Locke (Essay on Hum. Understand., bk. ii. ch. 14), "Reflection upon the train of ideas, which appear one after another in our minds, is that which furnishes us with the idea of succession; and the distance between any two parts of that succession, is that we call duration."

TIME-

See also Cousin (on Locke), Cours de Philosoph., leçons 17, 18; Reid, [Intell. Pow., essay iii. ch. 5; Stewart, Phil. Essays, essay ii. ch. 2; see also the Fragments of Royer Collard, at the end of tom. iv. of Œuvres de Reid.

Dr. Reid says—"I know of no ideas or notions that have a better claim to be accounted simple and original than those of space and time. . . . . The sense of seeing, by itself, gives us the conception and belief of only two dimensions of extension, but the sense of touch discovers three; and reason, from the contemplation of finite extended things, leads us necessarily to the belief of an immensity that contains them.

"In like manner, memory gives us the conception and belief of finite intervals of duration. From the contemplation of these, reason leads us necessarily to the belief of an eternity which comprehends all things that have a beginning and an end." In another passage of the same essay, ch. 3, he says—"We are at a loss to what category or class of things we ought to refer them. They are not beings, but rather the receptacles of every created being, without which it could not have had the possibility of existence. Philosophers have endeavoured to reduce all the objects of human thought to these three classes—of substances, modes, and relations. To which of them shall we refer time, space, and number, the most common objects of thought?"

In the philosophy of Kant, "Time is a necessary representation which lies at the foundation of all intuition. Time is given, à priori—it is the form of the internal sense, and the formal condition, à priori, of phenomena in general. Hence it will be seen that all intuition is nothing but the representation of phenomena; that the things we see or envisage are not in themselves what they are taken for; that if we did away with ourselves, that is to say, the subject or subjective quality of our senses in general, every quality that we discover in time and space, and even time and space themselves, would disappear. What objects may be in themselves, separated from the receptivity of our sensibility, is quite unknown to us."—Analysis of Kant's Criticism of Pure Reason, by the Translator, 8vo, Lond. 1844, p. 10.

TOPOLOGY.—V. MEMORIA TECHNICA.

TRADITION (trado, to hand down) " is any way of delivering a

### TRADITION-

thing or word to another."—Bp. Taylor, Dissussive from Popery. "Tradition is the Mercury (messenger) of the human race."—Tiberghien, Essai des Connaiss. Humaines, p. 50.

"Tradition! oh tradition! thou of the seraph tongue,

The ark that links two ages, the ancient and the young."

Adam Mickiewitz.

Nescire quid antea quam natus sis acciderit, id est semper

esse puerum.—Cicero, Orator., cap. 14.

When we believe the testimony of others not given by themselves directly but by others, this is *tradition*. It is testimony not written by the witness, nor dictated by him to be written, but handed down *memoriter*, from generation

to generation.

"According to the principle of tradition (as the ground of certainty), it is supposed that God himself first imparted truth to the world, pure and unmixed from heaven. In the paradisiacal state, and during the whole period from the first man down to the Christian era, it is said by these philosophers, there was a channel of divine communication almost perpetually open between the mind of man and of God. Here accordingly, it is thought we lay hold upon a kind of truth which is not subject to the infirmity of human reason, and which coming down to us by verbal or documental tradition from the mind of Deity itself, affords us at once a solid basis for all truth, and a final appeal against all error."—Morell, Philosoph. Tenden., p. 17.

See Molitor (J. F.), Philosophie de la tradition, 8vo, Paris,

1837.

On the necessity of Tradition, see Irenaus, i. 10.

TRAIN OF THOUGHT.—"The subject of the association of ideas," says Mr. Stewart (*Elements*, vol. i. ch. 5), "naturally divides itself into two parts. The *first* relates to the influence of association in regulating the *succession* of our thoughts; the *second*, to its influence on the intellectual powers, and on the moral character, by the more indissoluble *combinations* which it leads us to form in infancy and early youth."

While we are awake a constant succession of thoughts is passing through the mind. Hobbes calls it the con-sequence or train of imaginations, the train of thoughts and mental

### TRAIN OF THOUGHT-

discourse. He says it is of two sorts. The *first* is unguided without design, and inconstant. The *second* is more constant, as being regulated by some desire and design. That is, it is

spontaneous or intentional.

In the *Train of Thought*, or the succession of the various modes of consciousness, it has been observed that they succeed in some kind of order. "Not every thought to every thought succeeds indifferently," says Hobbes. And it has long been matter of inquiry among philosophers to detect the law or laws according to which the train or succession of thought is determined.

According to Aristotle, the consecution of thoughts is either necessary or habitual. By the necessary consecution of thoughts, it is probable that he meant that connection or dependence subsisting between notions, one of which cannot be thought without our thinking the other; as cause and effect, means and end, quality and substance, body and space. This consecution or connection of thoughts admits of no further explanation, than to say, that such is the constitution of the human mind.

The habitual consecution of thoughts differs in different individuals: but the general laws, according to which it is regulated, are chiefly three, viz., the law of similars, the law of contraries, and the law of co-adjacents. From the time of Aristotle, these laws have been noticed and illustrated by all writers on the subject. But it has been thought that these may be reduced to one supreme and universal law; and Sir James Mackintosh expresses his surprise (Dissert., p. 348, ed. Whewell) that Dr. Brown should have spoken of this as a discovery of his own, when the same thing had been hinted by Aristotle, distinctly laid down by Hobbes, and fully unfolded both by Hartley and Condillac.

The brief and obscure text of Aristotle, in his Treatise on Memory and Reminiscence, has been explained as containing the universal law as to the consecution of thoughts.—(Sir W. Hamilton, Reid's Works, p. 897.) It is proposed to call this the law of Redintegration. "Thoughts which have, at any time, recent or remote, stood to each other in the relation of co-existence, or immediate consecution, do, when severally reproduced, tend to reproduce each other." In other words.

# TRAIN OF THOUGHT—

"The parts of any total thought, when subsequently called into consciousness, are apt to suggest, immediately, the parts to which they were proximately related, and mediately, the whole of which they were constituent."

Hobbes, Leviathan, part i. ch. 3; Human Nat., p. 17; Reid,

Intell. Pow., essay iv.

TRANSCENDENT, TRANSCENDENTAL (transcendo, to go beyond, to surpass, to be supreme).—[(1.) In Kant's sense, transcendental applies to the conditions of our knowledge which transcend experience, which are à priori, and not derived from sensative reflection. (2.) The speculative problems which concern supersensible or supernatural being, transcending the range of sense and consciousness.—Ed.]

Transcendental is that which is above the prædicamental. Being is transcendental. The prædicamental is what belongs to a certain category of being; as the ten summa genera. As being cannot be included under any genus, but transcends them all, so the properties or affections of being have also been called transcendental. The three properties of being commonly enumerated are unum, verum, and bonum. To these some add aliquid and res: and these, with ens, make the six transcendentals. But res and aliquid mean only the same as ens. The first three are properly called transcendentals, as these only are passions or affections of being, as being.

"In the schools, transcendentalis and transcendens were convertible expressions employed to mark a term or notion which transcended, that is, which rose above, and thus contained under it, the categories or summa genera of Aristotle. Such, for example, is being, of which the ten categories are only subdivisions. Kant, according to his wont, twisted these old terms into a new signification. First of all he distinguished them from each other. Transcendent (transcendens) he employed to denote what is wholly beyond experience, being neither given as an à posteriori nor à priori element of cognition—what therefore transcends every category of thought. Transcendental (transcendentalis) he applied to signify the à priori or necessary cognitions which, though manifested in, as affording the conditions of, experience, transcend the sphere of that contingent or adventitious knowledge which we acquire by experience. Transcendental is not therefore what tran-

# TRANSCENDENT-

scends, but what in fact constitues a category of thought. This term, though probably from another quarter, has found favour with Mr. Stewart, who proposes to exchange the expression principles of common sense, for, among other names, that of transcendental truths."—Sir W. Hamilton, Reid's Works, note A, sec. 5.

In the philosophy of Kant all those principles of know-ledge which are original and primary, and which are determined à priori are called transcendental. They involve necessary and universal truths, and thus transcend all truth derived from experience which must always be contingent and particular. The principles of knowledge, which are pure and transcendental, form the ground of all knowledge that is empirical or determined à posteriori. In this sense

transcendental is opposed to empirical.

"There is a philosophie (and inasmuch as it is actualized by an effort of freedom, an artificial) consciousness which lies beneath, or (as it were) behind the spontaneous consciousness natural to all reflecting beings. As the elder Romans distinguished their nothern provinces into Cis-Alpine and Trans-Alpine, so may we divide all the objects of human knowledge into those on this side, and those on the other side of the spontaneous consciousness; citra et trans conseientium communem. The latter is exclusively the domain of pure philosophy, which is, therefore, properly entitled transcendental in order to discriminate it at once, both from mere reflection and representation on the one hand, and on the other from those flights of lawless speculation, which, abandoned by all distinct consciousness, because transgressing the bounds and purpose of our intellectual faculties, are justly condemned as transcendent."—Coleridge, Biograph. Liter., p. 143.

by the author of the Light of Nature Pursued, to denote the fact that our desires are often transferred from primary objects to those which are secondary or subservient; as from the desire of greatness or honour may arise, in a secondary way, the desire of wealth as a means of greatness or power.

—Tucker, Light of Nature; chapter on Transference or Translation.

TRANSMIGRATION.—V. METEMPSYCHOSIS.

TRANSPOSITION.—V. CONVERSION.

TRIVIUM.—The seven Liberal Arts were Grammar, Rhetoric, Logic, Arithmetic, Geometry, Astronomy, and Music.

Lingua, Tropus, Ratio, Numerus, Tonus, Angulus, Astra. Grammar, Logic, and Rhetoric, constituted the Trivium—tres viæ in unum, because they all refer to words or language. Arithmetic, Geometry, Music, and Astronomy, constituted the Quadrivium—quatuor viæ in unum, because they all refer to quantity.

"Gramm, loquitur, Dia. verba docet, Rhet. verba colorat; Mus canit., Ar. numcrat, Geo. ponderat, Ast. colit astra."

The Mechanical Arts were Rus, Nemus, Arma, Faber, Vulnera, Lana, Rates; or Agriculture, Propagation of Trees, Manufacture of Arms, Carpenters' work, Medicine, Weaving, and Ship-building. This division (Trivium) of the sciences is ascribed to St. Augustin; and we find it established in the sixth century.—Brucker, Hist Crit. Phil., tom. iii. p. 597.

TRUTH.—The conformity of knowledge with its object, or the harmony of thought with reality. It has been distinguished by most metaphysical writers, according as it respects being, knowledge, and speech, into veritas entis, cognitionis, et signi. By others, truth has been distinguished as entitative, objective, and formal, the truth of signs being included under the last.

Veritas entis.—Transcendental or Metaphysical Truth.

The pillar and ground of all truth is in truth of being—that truth by which a thing is what it is, by which it has its own nature and properties, and has not merely the appearance but reality of being. Philosophy is the knowledge of being, and if there were no real being, that is, if truth could not be predicated of things, there could be no knowledge. But things exist independently of being known. They do not exist because they are known, nor as they are known. But they are known because they are, and as they are, when known fully.

Veritas Cognitionis.

Truth as predicated of knowledge, is the conformity of our knowledge with the reality of the object known—for, as knowledge is the knowledge of something, when a thing is known as it is, that knowledge is formally true. Objective

### TRUTH—

truth is the conformity of the thing or object known with true knowledge. But there seems to be little difference whether we say that *truth* consists in the conformity of the formal conception to the thing known or conceived of, or in the conformity of the thing as it is to true knowledge.

Veritas Signi.

The *truth* of the sign consists in its adequateness or conformity to the thing signified. If falsity in those things which imitate another consists not in so far as they imitate, but in so far as they cannot imitate it or represent it adequately or fully, so the *truth* of a representation or sign consists in its being adequate to the thing signified. The *truth* and adequacy of signs belong to enunciation in logic.

"Independent of the truth which consists in the conformity of thoughts to things, called seientifie—and of that which lies in the correspondence of words with thoughts, called moral truth—there is a truth called logical, depending on the self-consistency of thoughts themselves. . . . . Thought is valueless except in so far as it leads to correct knowledge of things; a higher truth than the merely logical, in subservience to which the logical is desirable. . . . If we call the logical truth, subjective, as consisting in the due direction of the thinking subject, we may call this higher metaphysical truth, objective, because it depends on our thoughts fairly representing the objects that give rise to them."—Thomson, Outline of Laws of Thought, sec. 81, 82.

Veritas est adæquatio intellectus et rei, secundum quod intellectus dicit esse quod est, vel non esse quod non est."—Aquinas, Contra. Gent., i. 59.

Truth, in the strict logical sense, applies to propositions and to nothing else; and consists in the conformity of the declaration made to the actual state of the case; agreeably to Aldrich's definition of "a true" proposition—vera est qua quod res est dieit.

In its etymological sense, truth signifies that which the speaker "trows," or believes to be the fact. The etymology of the word  $\partial \lambda \eta \partial \hat{\epsilon}_{5}$ ,  $\tau \delta \mu \dot{\eta} \lambda \tilde{\eta} \partial \delta \nu$ , seems to be similar; denoting non-concealment. In this sense it is opposed to a *lie*; and may be called *moral*, as the other may be called *logical truth*.

## TRUTH-

"Truth is not unfrequently applied, in loose and inaccurate language, to arguments; when the proper expression would be 'correctness,' 'conclusiveness,' or 'validity.'

"Truth again, is often used in the sense of reality, 70 ov. People speak of the truth or falsity of facts; properly speaking, they are either real or fictitious; it is the statement that is 'true' or 'false.' The 'true 'cause of anything, is a common expression; 'meaning that which may with truth be assigned as the cause.' The senses of falsehood correspond."— Whately, Log., App. i.

"Necessary truths are such as are known independently of inductive proof. They are, therefore, either self-evident propositions, or deduced from self-evident propositions."—Kidd,

Principles of Reasoning, ch. 7.

Necessary truths are those in which we not only learn that the proposition is true, but see that it must be true; in which the negation is not only false, but impossible; in which we cannot, even by an effort of the imagination, or in a supposition, conceive the reverse of what is asserted.

"A necessary truth or law of reason, is a truth or law the opposite of which is inconceivable, contradictory, nonsensical, impossible; more shortly, it is a truth, in the fixing of which nature had only one alternative, be it positive or negative. Nature might have fixed that the sun should go round the earth, instead of the earth round the sun; at least we see nothing in that supposition which is contradictory and absurd. Either alternative was equally possible. But nature could not have fixed that two straight lines should, in any circumstances, enclose a space; for this involves a contradiction."— Ferrior, Inst. of Metaphys., p. 19.

Contingent truths are those which, without doing violence to reason, we may conceive to be otherwise. If I say "Grass is green," "Socrates was a philosopher," I assert propositions which are true, but need not have been so. It might have pleased the Creator to make grass blue—and Socrates might never have lived.

"There are truths of reasoning (reason) and truths of fact. Truths of reason are necessary, and their contradictory is impossible—those of fact are contingent, and their opposite is possible. When a truth is necessary you can find the reason

### TRUTH—

by analysis, resolving it into ideas and truths more simple, till you come to what is primitive."—Leibnitz, Nonveanx

Essais, iv. 2; Monadologie, sec. 33.

"Though the primary truths of fact and the primary truths of intelligence (the contingent and necessary truths of Reid) form two very distinct classes of the original beliefs or intuitions of our consciousness, there appears no sufficient ground to regard their sources as different, and therefore to be distinguished by different names. In this I regret that I am unable to agree with Mr. Stewart. See his Elements, vol. ii. ch. 1, and his Account of Reid, supra p. 27, B."—Sir W. Hamilton, Reid's Works, note A, p. 743.

"Truth implies something really existing. An assertion respecting the future may be probable or improbable, it may be honest or deceitful, it may be prudent or imprudent, it may have any relation we please to the mind of the person who makes it, or of him who hears it, but it can have no relation at all to a thing which is not. The Stoics said, Cicero will either be Consul or not. One of these is true, therefore the event is certain. But truth cannot be predicated of that which is not."—Coplestone, Enquiry into Necessity, Pref. p. 15.

"Truth implies a report of something that is; reality denotes the existence of a thing, whether affirmed or reported of or not. The thing reported either is or is not; the report is either true or false. The things themselves are sometimes called truths, instead of facts or realities. And assertions concerning matters of fact are called facts. Thus we hear of false facts, a thing literally impossible and absurd."—Coplestone, Remains, p. 105.

"No pleasure is comparable to the standing upon the vantage-ground of truth (a hill not to be commanded, and where the air is always clear and serene), and to see the errors and wanderings and mists and tempests in the vale below; so always that this prospect be with pity, and not with swelling or pride."—Bacon's Essay on Truth.

TRUTHS (First) are such as do not depend on any prior truth. They carry evidence in themselves. They are assented to as soon as they are understood. The assent given to them is so full, that while experience may confirm or familiarize it, it can

#### TRUTHS—

scarcely be said to increase it, and so clear that no proposition contradicting them can be admitted as more clear. That a whole is greater than any of its parts; that a change implies the operation of a cause; that qualities do not exist without a substance; that there are other beings in the world besides onrselves; may be given as examples of first truths. These truths are and must be assented to by every rational being, as soon as the terms expressing them are understood. They have been called zoval "evolal, communes notitiae, natural judgments, primitive beliefs, fundamental laws of the human mind, principles of common sense, principles of reason, principles of reasoning, &c.

propositions is impossible; for they are not in the soul as propositions; but it is an undoubted truth that a mind awaking out of nothing into being, and presented with particular objects, would not fail at once to judge concerning them according to, and by the force of, some such innate principles as these, or just as a man would judge who had learnt these explicit propositions; which indeed are so nearly allied to its own nature, that they may be called almost a part of itself. . . . . Therefore I take the mind or soul of man not to be so perfectly indifferent to receive all impressions as a rasa tabula, or white paper. . . . "Hence there may be some practical principles also innate in the foregoing sense, though not in the form of propositions."—Watts, Philosoph. Essays, sec. 4.

"From the earliest records of time, and following the course of history, we everywhere find the principles of common sense, as universal elements of human thought and action. No violence can suppress, no sophisms obscure them. They steadily and unerringly guide us through the revolutions and destruction of nations and empires."—Van de Weyer.

According to Sir W. Hamilton (lect. 38), Leibnitz first distinguished these by the characters of necessity and universality. Descartes had touched upon them—Spinoza had noticed universality as a characteristic. But this follows from their necessity. Sir W. H. does not seem to have been aware of Hutcheson, in his *Inaugural Ovation*, noticing both, and

### TRUTHS—

noticing them as recognized by the ancients. See Vocabulary,

under Innate Ideas, where the passage is quoted.

On the nature, origin, and validity of first truths, the following authors may be consulted: -Lord Herbert, De Veritate; Buffier, Treatise of First Truths; Reid, Inquiry and Essays on Intell. Pow.; Sir W. Hamilton, Reid's Works, App, note A.—V. Common Sense.

TYPE (τύπος, typus, from τύπτω, to strike).

"Great father of the gods, when for our crimes Thou send'st some heavy judgment on the times,-Some tyrant king, the terror of his age, The type and true vicegerent of thy rage, Thus punish him."-Dryden, Persius, sat. 3.

"So St. Hierome offered wine, not water, in the type of his

blood."—Bishop Taylor, Of Real Presence, sec. 6.

Among the Greeks the first model which statuaries made in clay of their projected work was called τύπος. Τηρε means the first rude form or figure of anything-an adumbration or shadowing forth. The thing fashioned according to it was the eetype, and the type in contrast the protype. But archetype was applied to the original idea, model, or exemplar, not copied, but of which other things were copies.

"A type is an example of any class, for instance, a species of a genus, which is considered as eminently possessing the characters of the class."-Whewell, Induet. Seiences, viii.

ii. 10.

For the meaning of a type in the arts of design, see Sir Edmund Head, Hist of Painting, Pref. p. 39.—V. Homotype.

UBIETY (ubi, where) is the presence of one thing to another, or the presence of a thing in place. The schoolmen distinguished ubiety as-

1. Circumscriptive, by which a body is so in one place that its parts are answerable to the parts of space in which it is, and exclude every other body.

2. Definitive, as when a human spirit is limited or defined in its presence to the same place as a human body.

### UBIETY-

3. Repletive, at when the Infinite Spirit is present through

every portion of space.

This last is sometimes called *ubiquity*, and means the Divine Omnipresence.—Leibnitz, *Nouv. Essais*, liv. ii. cap. 23, sec. 21.

fold signification, as denoting either the entire absence of all restriction, or more widely, the entire absence of all relation.

The former we regard as its only legitimate application."—

Calderwood, Phil. of the Infinite, p. 36.

In the philosophy of Kant it is that which is absolutely and in itself, or internally possible, and is exempted from the conditions circumscribing a thing in time or space. Sir W. Hamilton (after Kant) unites the *infinite* and the *absolute* under a larger abstraction, the *unconditioned*,—the *infinite* being the *unconditionally unlimited*, the *absolute* the *unconditionally limited*.

UNDERSTANDING.—[This term applies properly to the reasoning power—the judgment; the faculty which obtains knowledge by comparison and combination.—Ed.] "Perhaps the safer use of the term, for general purposes, is to take it as the mind, or rather as the man himself considered as a concipient as well as a percipient being, and reason as a power supervening."—Coleridge, Statesman's Manual, App.

в. р. 264.

"In its wider acceptation, understanding is the entire power of perceiving and conceiving, exclusive of the sensibility; the power of dealing with the impressions of sense, and composing them into wholes according to a law of unity; and in its most comprehensive meaning it includes even simple apprehension. Thus taken at large it is the whole spontaneity of the representing mind: that which puts together the multifarious materials supplied by the passive faculty of sense, or pure But we may consider the understanding in receptivity. another point of view, not as the simple faculty of thought, which produces intuitions and conceptions spontaneously, and comes into play as the mere tool or organ of the spiritual mind; but as a power that is exercised on objects which it supplies to itself, which does not simply think and reflect, but which examines its thoughts, arranges and compares them;

### UNDERSTANDING-

and this for scientific, not for directly practical, purposes. To intellectualize upon religion, and to receive it by means of the *understanding* are two different things, and the common exertion of this faculty should of course be distinguished from that special use of it, in which one man differs from another, by reason of stronger original powers of mind, or greater improvement of them by exercise."—Coleridge, *Aids to Reflection*, vol. ii. p. 38.

"The understanding is the medial faculty, or faculty of means, as reason on the other hand is the source of ideas or ultimate ends. By reason we determine the ultimate end: by the understanding we are enabled to select and adopt the appropriate means for the attainment of, or approximation to, this end, according to circumstances. But an ultimate end must of necessity be an idea, that is, that which is not representable by the senses, and has no correspondent in nature, or the world of the senses. . . . . Understanding and sense constitute the natural mind of man, mind of the flesh. Φρόνημα σαρκός, as likewise ψυχική σύνεσις, the intellectual power of the living or animal soul, which St. Paul everywhere contradistinguishes from the spirit, that is, the power resulting from the union and co-influence of the will and reasonσοφία or wisdom."—Coleridge, Notes on English Div., vol. ii. p. 338.

"The reason and the understanding have not been steadily distinguished by English writers. . . . To understand anything is to apprehend it according to certain assumed ideas and rules; we do not include in the meaning of the word an examination of the ground of the ideas and rules by reference to which we understand the thing. We understand a language, when we apprehend what is said, according to the established vocabulary and grammar of the language, without inquiring how the words came to have their meaning, or what is the ground of the grammatical rules. We understand the sense without reasoning about the etymology and syntax."—Whewell's Elements of Morality, Introd. sec. 11.

"'There is one faculty,' says Aristotle (Eth., lib. 6), 'by which man comprehends and embodies in his belief first principles which cannot be proved, which he must receive from some authority; there is another by which, when a

### UNDERSTANDING-

new fact is laid before him, he can show that it is in conformity with some principle possessed before. One process resembles the collection of materials for building—the other their orderly arrangement. One is intuition,—the other logic. One νοῦς, the other ἐπιστήμη.' Or to use a modern distinction, one is reason in its highest sense, the other understanding."—Sewell, Christ. Mor., ch. 21.

"I use the term understanding, not for the noetic faculty, intellect proper, or place of principles, but for the dianoetic, or discursive faculty in its widest signification, for the faculty of relations or comparisons; and thus in the meaning in which Verstand is now employed by the Germans."—Sir W. Hamil-

ton, Discussions, p. 4, note.

" Understanding, intellect (Verstand) is the faculty which conjoins the diversity which is furnished us by the senses, and forms into a whole the sensible representations which are given to us. The word Verstand is used occasionally as being synonymous with Vernunft (reason), and is the faculty of cognition in general, and in this sense the critic of pure reason might be termed also the critic of pure understanding. The discursive understanding is the faculty of cognizing objects, not immediately, but through conceptions. And as intuition belongs to cognition, and as a faculty of a complete spontaneousness of intuition, or which perceives the intuition not passively, but produces spontaneously from itself, a cognitionfaculty different from, and independent of, what is the sensibility, would be, consequently, understanding in the widest sense; we might think such an intuitive, envisaging understanding (intellectus intuitivus) negatively, as a non-discursive understanding. The gemeiner Menschen Verstand and the Gemeinsinn are sensus communis logicus, or common sense; and the gesunder Verstand, sound sense. Sir J. Mackintosh prefers the term intellect to that of understanding as the source of conceptions."-Haywood, Crit. of Pure Reason, p. 605.

UNIFICATION is the act of so uniting ourselves with another as to form one being. Unification with God was the final aim of the Neo-Platonicians. And unification with God is also one of the beliefs of the Chinese philosopher, Lao Tseu.

UNITARIAN (A) is a believer in one God. It is the same in meaning as Monotheist. In this large sense it is applicable

### UNITARIAN—

to all Christians, for they all believe in the unity of the Divine nature; and also to Jews and Mahommedans. It may even include Deists, or those who believe in God on grounds of reason alone. But the name is commonly opposed to Trinitarian, and is applied to those who, accepting the Christian revelation, believe in God as existing in one person, and acknowledge Jesus Christ as his messenger to men.

UNITY or ONENESS (unum, one) is a property of being. If anything is, it is one and not many. Omne ens est unum.

Unity is defined to be that property, qua ens est indivisum in se et divisum ab omni alio.

Locke (Essay on Hum. Understand, bk. ii. ch. 16) makes unity synonymous with number. But Aristotle (Metaphys., lib. iv. cap. 6, lib. x. cap. 1) more correctly makes unity the element of number, and says that unity is indivisibleness. That which is indivisible, and has no position, is a monad. That which is indivisible, but has a position, is a point. That which is divisible only in one sense is a line. That which is divisible in two senses is a plane. And that which is divisible in three senses is a body in respect of quantity.

According to Aristotle (*Metaphys.*, lib. x. cap. 1, the modes of *unity* are reducible to four, that of continuity, especially natural continuity, which is not the result of contact or tie—that of a whole naturally, which has figure and form, and not like things united by violence—that of an individual, or that which is numerically indivisible—and that of a universal, which is indivisible in form and in respect of science.

Unity has been divided into transcendental or entitative, by which a being is indivisible in itself—logical, by which things like each other are classed together for the purposes of science—and moral, by which many are embodied as one for the purposes of life, as many citizens make one society, many soldiers one army.

Unity is opposed to plurality, which is nothing but plures entitates aut unitates.

Unity is specific or numerical. The former may rather be called *similitude*, and the latter *identity*.—Hutcheson, *Metaphys.*, pars. 3, cap. 3.

"The essential diversity of the ideas unity and sameness was among the elementary principles of the old logicians; and

#### UNITY-

the sophisms grounded on the confusion of these terms have been ably exposed by Leibnitz in his critique on Wissowatius."—Coleridge, Second Lay Sermon, p. 367. See also Aids

to Reflection, p. 157.

UNIVERSALS.—Universal terms may denote.—1. A mathematical universality, as all circles (no exception) have a centre and circumference.
2. A physical universality, as all men use words to express their thoughts (though the dumb cannot).
3. A moral universality, as all men are governed by affection

rather than by reason.

Universal (unum versus alia) means, according to its composition, one towards many. It is defined by Aristotle (Lib. de Interpret., cap. 5), "that which by its nature is fit to be predicated of many." And (Metaphys., lib. v. cap. 13) "that which by its nature has a fitness or capacity to be in many." It implies unity with community, or unity shared in by many.

Universals have been divided into—1. Metaphysical, or universalia ante rem. 2. Physical, or universalia in rc. 3. Logi-

cal, or universalia post rem.

By the first are meant those archetypal forms, according to which all things were created. As existing in the Divine mind and furnishing the pattern for the Divine working, these may be said to correspond with the *ideas* of Plato.

By universals in the second sense are meant certain common natures, which, one in themselves, are diffused over or shared

in by many—as rationality by all men.

By universals in the third sense are meant general notions framed by the human intellect, and predicated of many things, on the ground of their possessing common properties—as animal, which may be predicated of man, lion, horse, &c.

Realists give prominence to universals in the first and second signification. Nominalists hold that the true meaning of universals is that assigned in the third sense. While conceptualists hold an intermediate view.—Reid, Intell. Pow., essay v. ch. 6; Thomson, Outline of Laws of Thought, 2d ed. sec. 23.

In ancient philosophy the universals were called pradicables (q. v.), and were arranged in five classes—genus, species, differentia, proprium, and accidens. It is argued that there can be

## UNIVERSALS—

neither more nor fewer. For whatever is predicated of many is predicated essentially or accidentally; if essentially, either of the whole essence, and then it is a species; of a common part of the essence, and then it is a genus; or of a proper part of the essence, and then it is the differentia essentialis; if accidentally, it either flows from the essence of the subject, and is its proprium, or does not flow from its essence, and is its accidens.

Or it may be argued thus-universality is a fitness of being predicated of many, which implies identity or sameness, or at least resemblance. There will therefore be as many classes of universals as there are kinds of identity. Now, when one thing is said to be the same with another, it is so either essentially or accidentally; if essentially, it is so either completely or incompletely; if completely, it gives a species; incompletely, it is so in form, and gives the differentia, or in matter and gives the genus; if accidentally, it is the same either necessarily and inseparably, and constitutes the proprium—or contingently and scparably, and is the accidens.— Tellez, Summa, pars. 1, dis. v. sec. 1. But the fivefold classification of universals is censured by Derodon, Log., pars. 2, See also Thomson, Outline of Laws of Thought cap. 6. sec. 37.

UNIVOCAL WORDS (una, one; vox, word or meaning) "are such as signify but one idea, or at least but one sort of thing; the words book, bible, fish, house, elephant, may be called univocal words, for I know not that they signify anything else but those ideas to which they are generally affixed."—Watts Log., bk. i. cap. 4.

"I think it is a good division in Aristotle, that the same word may be applied to different things in three ways: univocally, analogically, and cquivocally. Univocally, when the things are species of the same genus; analogically, when the things are related by some similitude or analogy; equivocally, when they have no relation but a common name."—Reid Correspondence, p. 75.

In Logic a common term is called *univocal* in respect of those things or persons to which it is applicable in the same signification, as the term "man." Whately observes that the "usual divisions of nouns into *univocal*, *cquivocal*, and *ana-*

#### UNIVOCAL-

logous, and into nouns of the first and second intention, are not, strictly speaking, divisions of words, but divisions of the manner of employing them; the same word may be employed either univocally, equivocally, or analogously; either in the first intention or the second."—Logic, bk. ii. ch. 5, sec. 1.

UTILITY.—[Adaptation to serve an end generally desired by men.—Ed.]

"What is useful only has no value in itself; but derives all its merits from the end for which it is useful."—Reid, Act. Pow., essay v. ch. 5.

"Utility is an idea essentially relative, which supposes a higher term."—Manuel de Philosoph., p. 344.

The doctrine of utility in morals is, that actions are right because they are useful [or fitted to gain ends generally desired]. It has been held under various forms. Some who maintain that utility or beneficial tendency is what makes an action right, hold that a virtuous agent may be prompted by self-love (as Paley), or by benevolence (as Rutherforth), or partly by both (as Hume). And the beneficial tendency of actions has by some been viewed solely in reference to this life (as Hume and Bentham), while by others it has been extended to a future state (as Paley), and the obligation to do such actions has been represented as arising from the rewards and punishments of that future state, as made known by the light of nature and by revelation (as Dwight).

The fundamental objection to the doctrine of utility in all its modifications, is that taken by Dr. Reid (Act. Pow., essay v. ch. 5), viz., "that agreeableness and utility are not moral conceptions, nor have they any connection with morality. What a man does, merely because it is agreeable, is not virtue. Therefore the Epicurean system was justly thought by Cicero, and the best moralists among the ancients, to subvert morality, and to substitute another principle in its room: and this system is liable to the same censure." "Honestum, igitur, id intelligimus, quod tale est, ut, detracta omni utilitate, sine ullis premiis fructibusve, per seipsum jure possit laudari."—De Finibus, ii. 14.

"The creed which accepts as the foundation of morals, utility, or the greatest happiness principle, holds that actions are right in proportion as they tend to promote happiness,

#### UTILITY-

wrong as they tend to produce the reverse of happiness. By happiness is intended pleasure, and the absence of pain; By unhappiness, pain, and the privation of pleasure."—J. S. Mill, Utilitarianism, p. 9.

**VELLEITY** (volo, to will) is an indolent or inactive wish or inclination towards a thing, which leads to no energetic effort to obtain it, as when it is said, "The cat likes fish, but will not touch the water."

"The wishing of a thing is not properly the willing it, but it is that which is called by the schools an imperfect velleity, and imports no more than an idle inoperative complacency in, and desire of the end, without any consideration of the means."—South.

"A volition which cannot carry itself into execution."— Müller.

VERACITY is the duty of preserving the truth in our conversation. It is natural for us to speak as we think, and to believe that others do the same. So much so that Dr. Reid enumerates an instinct of veracity and a corresponding instinct of credulity as principles of human nature. Children do not distrust nor deceive. It is not till interest or passion prompts men, that they conceal or disguise the truth.

VERBAL is opposed to real—1. As name is opposed to thing; and 2. As insincere is opposed to sincere. "Great acclamations and vcrbal praises and acknowledgments, without an honest and sincere endeavour to please and obey him, are but pieces of mockery and hypocritical compliment."—Hale, Cent. of Afflictions.

"Sometimes the question turns on the meaning and extent of the terms employed; sometimes on the things signified by them. If it be made to appear, therefore, that the opposite sides of a certain question may be held by parties not differing in their opinion of the matter in hand, then that question may be pronounced verbal; or depending on the different senses in which they employ the terms. If, on the contrary, it appears that they employ the terms in the same sense, but

#### VERBAL-

still differ as to the application of one of them to the other, then it may be pronounced that the question is *real*—that they differ as to the opinions they hold of the *things* or questions."—Whately.

VIRTUAL is opposed to actual.

A thing has a virtual existence when it has all the conditions necessary to its actual existence. The statue exists virtually in the brass or iron, the oak in the acorn. The canse virtually contains the effect. In the philosophy of Aristotle, the distinction between δύναμις, and ἐντελέχεια, or ἐνέργεια i.e., potentia or virtus, and actus is frequent and fundamental.

"A letter of credit does not in reality contain the sum which it represents: that sum is only really in the coffer of the banker. Yet the letter contains the sum in a certain sense, since it holds its place. This sum is in still another sense, contained; it is virtually in the credit of the banker who subscribes the letter. To express these differences in the language of Descartes, the sum is contained formally in the coffer of the banker, objectively in the letter which he subscribed, and eminently in the credit which enabled him to subscribe; and thus the coffer contains the reality formal of the sum, the letter the reality objective, and the credit of the banker the reality eminent."—Royer Collard, Œuvres de Reid, tom. ii. p. 356.

VIRTUE.—[1. An act which is in harmony with moral law. 2. A disposition harmonizing with a special form of moral law, and which has the force of fixed habit.—Ed.]

"Virtus, in Latin, from vir, a man, and àçetá in Greek, from "Aças, Mars, give us the primary idea of manly strength. Virtue, then, implies opposition or struggle. In man, the struggle is between reason and passion—between right and wrong. To hold by the former is virtue, to yield to the latter is vice. According to Aristotle, virtue is a practical habit acquired by doing virtuous acts. He called those virtues intellectual, by which the intellect was strengthened, and moral, by which the life was regulated. Another ancient division was that of the cardinal virtues—wisdom, temperance, courage, and justice. The theological virtues were faith, hope. and charity.

## VIRTUE-

As *virtue* implies trial or difficulty, it cannot be predicated of God. He is holy.

Kant frequently insists upon the distinction between virtue and holiness. In a holy being, the will is uniformly and without struggle in accordance with the moral law. In a virtuous being, the will is liable to the solicitations of the sensibility, in opposition or resistance to the dictates of reason. This is the only state of which man is capable in this life. But he ought to aim and aspire to the attainment of the higher or holy state, in which the will without struggle is always in accordance with reason. The Stoics thought the beau ideal of virtue, or the complete subjection of sense and appetite to reason, attainable in this life.

VOLITION (volo, to will), [an exercise of will].—Volition "is an act of the mind knowingly exerting that dominion it takes itself to have over any part of the man, by employing it in, or withholding it from, any particular action."—Locke, Essay,

bk. ii. ch. 21, sec. 15.

"There is an error which lies under the word volition. Under that word you include both the final perception of the understanding which is passive, and also the first operation or exertion of the active faculty of self-motive power. These two you think to be necessarily connected. I think there is no connection at all between them; and that in their not being connected lies the difference between action and passion; which difference is the essence of liberty."—Dr. Sam. Clarke, Second Letter to a Gentleman, p. 410.

Things are sought as ends or as means.

The schoolmen distinguished three acts of will, circa finem, Velleity, Intention, and Fruition. Gen. iii. 6:—When the woman saw that the tree was good for food, and that it was pleasant to the eyes, and a tree to be desired to make one wise (this is velleity) she took thereof (this is intention) and did eat (this is fruition). There are also three acts, circa media, viz., consent, approving of means—election, or choosing the most fit, and application, use, or employing of them.

WELL-BEING.—"This is beyond all doubt, and indisputable," says Leighton, in his *Theological Lectures*, "that all men wish well to themselves; nor can the mind of man divest itself of this propensity, without divesting itself of its being. This is what the schoolmen mean when in their manner of expression they say that 'the will (voluntas, not arbitrium is carried towards happiness, not simply as will, but as nature.' 'No man hateth his own flesh.'"

"One conclusion follows inevitably from the preceding position," says Coleridge (Aids to Reflection, vol. i. p. 20, ed. 1848), "namely, that this propensity can never be legitimately made the principle of morality, even because it is no part or appurtenance of the moral will: and because the proper object of the moral principle is to limit and control this propensity, and to determine in what it may be, and in what it ought to be, gratified; while it is the business of philosophy to instruct the understanding, and the office of religion to convince the whole man, that otherwise than as a regulated, and of course therefore a subordinate, end, this propensity, innate and inalienable though it be, can never be realized or fulfilled."

WHOLE (ὅλος).—"There are wholes of different kinds; for, in the first place, there is an extended whole, of which the parts lie contiguous, such as body and space. Secondly, There is a whole, of which the parts are separated or discrete, such as number, which, from thence, is called quantity discrete. Thirdly, There is a whole, of which the parts do not exist together, but only by succession, such as time, consisting of minutes, hours, and days, or as many more parts as we please, but which all exist successively, or not together. Fourthly, There is what may be called a logical whole, of which the several specieses are parts. Animal, for example, is a whole, in this sense, and man, dog, horse, &c., are the several parts of it. And fifthly, The different qualities of the same substance, may be said to be parts of that substance."—Monboddo, Ancient Metaphys., bk. ii. ch. 12.

Every whole as a whole is one and undivided. But though not divided, a whole may be divisible in thought, by being reduced to its elements mentally, or it may be altogether indivisible even in thought. This latter is what metaphysicians call Totum perfectionale, and is only applicable to Deity,

### WHOLE-

who is wholly in the universe, and wholly in every part of it.

A divisible whole is distinguished as potential, or that which is divisible into parts by which it is not constituted, as animal may be divided into man and brute, but is not constituted by them; and actual, or that which is divisible into parts by which it is constituted, as man may be divided into soul and body.

An actual whole is either physical or metaphysical. A physical whole is constituted by physical composition, and is integral when composed of the integrant parts of matter, or essential when composed of matter and form. A metaphysical whole is constituted by metaphysical composition, which is fourfold:—1. A whole made up of genus and differentia is an essential specific whole—as man, in so far as he is a species of animal, is made up of the genus (animal) and the differentia (rational). 2. A whole made up of the specific nature and the individual differentia, is an essential numerical whole. 3. A whole of existence, contains a singular essence and existence added. 4. A whole of subsistence has subsistence added to existence.—Baronius, Metaphys. Generalis, sec. 15.

According to Derodon (Log., 3 pars. p. 70), an essential whole is that from which if any part be taken the being perishes—as man in respect of his body and soul. An integral whole is that from which, if any part be taken, the being is not entire but mutilated. Man with all his members is an integral whole; cut off a limb, he is not an integral, but still an essential whole.

"A whole is composed of distinct parts. Composition may be physical, nuctaphysical, or logical.

"A physical whole is made up of parts distinct and separate, and is natural, as a tree; artificial, as a house; moral, or conventional, as a family, a city, &c.

"A metaphysical whole arises from metaphysical composition, as potence and act, essence and existence, &c.

"A logical whole is composed by genus and differentia, and is called a higher notion, which can be resolved into notions under it, as genus into species, species into lower species. Thus, animal is divided into rational and irrational, knowledge into science, art, experience, opinion, belief.

### WHOLE-

"Of the parts into which a whole is divisible, some are essential, so that if one is wanting the being ceases, as the head or heart in man; others are integral, of which if one or more be wanting the being is not entire, as in man, an eye or arms; others are constituent, such as concur to form the substance of the thing, as oxygen and hydrogen in water."—Peemans, Introd. ad. Philosoph., p. 72.

WHY?—[For what reason?] As an interrogative, this word is employed in three senses, viz.,—"By what proof (or reason)?" "From what cause?" "For what purpose?" This last is commonly called the "final cause,"—c.g., "Why is this prisoner guilty of the crime?" "Why does a stone fall to the earth?" "Why did you go to London?" Much confusion has arisen from not distinguishing these different inquiries.—Whately, Log., App. 1.

WILL.—[The power by which we determine personal action. Its result is a personal act, mental or bodily, in contrast with a spontaneous act, as involuntary recollection,—a reflex act, as shrinking under pain,—and the loose sense in which we speak of the action of the laws of nature. On account of its essential connection with intelligence, it is denominated a power of rational self-determination.—Ed.]

"Every man is conscious of a power to determine," says Dr. Reid (Act. Pow., essay ii. ch. 1), "in things which he conceives to depend upon his determination. To this power we give the name of will."

"Will is an ambiguous word, being sometimes put for the faculty of willing; sometimes for the act of that faculty, besides other meanings. But volition always signifies the act of willing, and nothing else. Willingness, I think, is opposed to unwillingness or aversion. A man is willing to do what he has no aversion to do, or what he has some desire to do, though perhaps he has not the opportunity; and I think this is never called volition."—Correspondence of Dr. Reid, p. 79.

"By the term will I do not mean to express a more or less highly developed faculty of desiring; but that innate intellectual energy which, unfolding itself from all the other forces of the mind, like a flower from its petals, radiates through the whole sphere of our activity—a faculty which we are better able to feel than to define, and which we might, perhaps, most

#### WILL-

appropriately designate as the purely practical faculty of man."—Feuchtersleben, Dietetics of the Soul.

"Appetite is the will's solicitor, and the will is appetite's controller; what we covet according to the one, by the other we often reject."—Hooker, Eccles. Pol., bk. i.

On the difference between desiring and willing, see Locke Essay on Hum. Understand., bk. ii. ch. 21; Reid, Act. Pow., essay ii. ch. 2; Stewart, Act. and Mor. Pow., App. p. 471.

By some philosophers this difference has been overlooked, and they have completely identified desire and volition.

[Descartes, Principles, xxxii.]

"What is desire," says Dr. Priestly (Philosoph. Necess., p. 35), "besides a wish to obtain some apprehended good? And is not every wish a volition? Every volition is nothing more than a desire, viz., a desire to accomplish some end, which end may be considered as the object of the passion or affection."

"Volition," says Mr. Belsham, "is a modification of the passion of desire." Mr. James Mill, in his Analysis of the Hum. Mind, holds that the will is nothing but the desire that is most powerful at the time. Dr. Thomas Brown, in his Lectures on Mor. Philosophy, has not spoken of the faculty of will or of acts of volition as separate from our desires. And in his Essay on Cause and Effect, sec. 3, he has said, "Those brief feelings which the body immediately obeys are commonly termed volitions, while the more lasting wishes are simply denominated desires."

The view opposed to this is strongly asserted in the following passage:—"We regard it as of great moment that the will should be looked on as a distinct power or energy of the mind. Not that we mean to represent it as exercised apart from all other faculties; on the contrary, it blends itself with every other power. It associates itself with our intellectual decisions on the one hand, and our emotional attachments on the other, but contains an important element which cannot be resolved into either the one or the other, or into both combined. The other powers, such as the sensibility, the reason, the conscience, may influence the will, but they cannot constitute it, nor yield its peculiar workings. We have only by consciousness to look into our souls, as the will is working, to

## WILL—

discover a power, which, though intimately connected with the other attributes of mind, even as they are closely related to each other, does yet stand out distinctly from them, with its peculiar functions and its own province. We hold that there cannot be an] undertaking more perilous to the best interests of philosophy and humanity, than the attempt to resolve the will into anything inferior to itself. In particular it may be, and should be distinguished from that with which it has been so often confounded, the emotional part of man's nature."

That each man is, as regards his own acts, an originating cause not determined by other causes, is Aristotle's view throughout.—Aristotle's *Ethics*, Grant, ii. 114.

According to Ritter (Hist. of Anc. Philosoph., vol. iii. p. 555), "it was a principle with the Stoics that will and desire are one with thought, and may be resolved into it." Hence their saying, Omnc actum cst in intellectu. And hence they maintained that passion was just an erroneous judgment. But this is to confound faculties which are distinct. By the intellect we know or understand, by the sensitivity we feel or desire, and by the will we determine to do or not to do, to do this or to do that.

Intellectus est prior voluntate, non cnim est voluntas nisi de bono intellecto.—Thomas Aquinas, Sum. Theol., ii. 1, quæst. 83.

Ea quæ sunt in intellectu sunt principia eorum quæ sunt in affectu, in quantum scilicet bonum intellectum movet affectum.— Ibidem, ii. 2, quæst. 7, art. 2.

"Whether or no the judgment does certainly and infallibly command and draw after it the acts of the will, this is certain, it does of necessity precede them, and no man can fix his love upon anything till his judgment reports it to the will as amiable."—South, Scrmon on Matt. x. 37.

On the question, whether the connection between the intellect and the will be direct or indirect, see Locke, Essay on Hum. Understand., bk. i. ch. 21; Jonathan Edwards, Inquiry, part i. sec. 2; Dr. Turnbull, Christ. Philosoph., p. 196.

Will (Freedom of).—"This is the essential attribute of a will, and contained in the very idea, that whatever determines the will acquires this power from a previous determination of the will itself. The will is ultimately self-determined, or it is

## WILL-

no longer a will under the law of perfect freedom, but a nature under the mechanism of cause and effect."—Coleridge, Aids to Reflection, vol. i. p. 227.

"We need only to reflect on our own experience to be convinced that the man makes the motive, and not the motive the man. What is a strong motive to one man, is no motive at all to another. If, then, the man determines the motive, what determines the man to a good and worthy act, we will say, or a virtuous course of conduct? The intelligent will or the self-determining power? True, in part it is; and therefore the will is pre-eminently the spiritual constituent in our being. But will any man admit, that his own will is the only and sufficient determinant of all he is, and all he does? Is nothing to be attributed to the harmony of the system to which it belongs, and to the pre-established fitness of the objects and agents, known and unknown, that surround him, as acting on the will, though, doubtless, with it likewise? a process which the coinstantaneous, yet reciprocal action of the air and the vital energy of the lungs in breathing, may help to render intelligible."—Coleridge, Aids to Reflection, vol. i. p. 44.

"It is very true that in willing an act, or in any act of self-determination, I am or may be induced by a variety of motives or impulses-my will may be moved; but this does not exclude the power of origination, for the consent even to the outward inducement or stimulus, still requires this unique act of self-determination in order to the energy requisite to the fulfilment of the deed. That it is so, who shall doubt who is conscious of the power? or if he believe that he has not this consciousness he belies his own nature. The actuation of the individual Will not only does not exclude selfdetermination, but implies it-implies that, though actuated, but actuated only because already self-operant, it is not compelled or acting under the law of outward causation. How often do we not see that a stern resolve has produced a series of actions, which, sustained by the inward energy of the man, has ended in its complete achievement? Contrast this with the life and conduct of the wayward, the fickle and the unsteady, and it is impossible not to find the inward conviction strengthened and confirmed, that the will is the inward and

WILL-

enduring essence of man's being."—Green, Mental Dynamics

p. 54.

"Will," says Kant, "is that kind of causality attributed to living agents, in so far as they are possessed of reason, and freedom is such a property of that causality as enables them to originate events independently of foreign determining causes."

WISDOM, says Sir W. Temple, "is that which makes man judge what are the best ends, and what the best means to attain them."

"Wisdom," says Sir J. Mackintosh, "is the habitual employment of a patient and comprehensive understanding in combining various and remote means to promote the happiness of mankind."

Wisdom is the right use or exercise of knowledge, and differs from knowledge, as the use which is made of a power

or faculty differs from the power or faculty itself.

Proverbs ch. xv. v. 2, The tongue of the wise useth knowledge aright. Knowledge puffeth up. Knowledge is proud that he hath learned so much. Wisdom is humble that he knows no more.

The word corresponding to wisdom was used among the Greeks to designate philosophy. And in our translation of the Scriptures, the word wisdom frequently denotes the

religious sentiment, or the fear and love of God.

WIT (wite, to know) originally signified knowledge or wisdom. We still say, in his wits, out of his wits, for in or out of a sound mind. Mr. Locke says (Essay, bk. ii. ch. 11), "Wit lies most in the assemblage of ideas, and putting those together with quickness and variety, wherein can be found any resemblance or congruity, thereby to make up pleasant pictures, and agreeable visions in the fancy. Judgment, on the contrary, lies quite on the other side, in separating carefully one from another, ideas, wherein can be found the least difference, thereby to avoid being misled by similitude, and by affinity to take one thing for another. This is a way of proceeding quite contrary to metaphor and allusion, wherein, for the most part, lies that entertainment and pleasantry of wit, which strikes so lively on the fancy, and therefore is so acceptable to all people; because its beauty appears at first

WIT-

sight, and there is required no labour of thought to examine what truth or reason there is in it."

"This," says Mr. Addison (Spectator, 62), "is, I think, the best and most philosophical account that I ever met with of wit, which generally, though not always, consists in such a resemblance and congruity of ideas as this author mentions. I shall only add to it, by way of explanation, that every resemblance of ideas is not that which we call wit, unless it be such an one that gives delight and surprise to the reader: these two properties seem essential to wit, more particularly the last of them. . . . . Mr. Locke's account of wit, with this short explanation, comprehends most of the species of wit, as metaphors, similitudes, allegories, enigmas, mottoes, parables, fables, dreams, visions, dramatic writings, burlesques, and all the methods of allusion; as there are many other pieces of wit, how remote soever they may appear at first sight, from the foregoing description, which, upon examination, will be found to agree with it."

"It is the design of wit," says Dr. Campbell (Phil. of Rhet., bk. i. ch. 2, sec. 1), "to excite in the mind an agreeable surprise, and that arising, not from anything marvellous in the subject, but solely from the imagery she employs, or the strange assemblage of related ideas presented to the mind. This end is effected in one or other of these three ways: first, in debasing things pompous or seemingly grave: I say seemingly grave, because to vilify what is truly grave, has something shocking in it, which rarely fails to counteract the end; secondly, in aggrandizing things little and frivolous; thirdly, in setting ordinary objects, by means not only remote but apparently contrary, in a particular and uncommon point of view."

Dr. Barrow (Sermon against Foolish Talking), speaking of facetiousness, says, "Sometimes it lieth in part allusion to a known story, or in seasonable application of a trivial saying, or in forging an opposite tale: sometimes it playeth in words and phrases, taking advantage from the ambiguity of their sense, or the affinity of their sound: sometimes it is wrapped in a dress of humorous expression: sometimes it lurketh under an odd similitude: sometimes it is lodged in a sly question, in a smart answer, in a quirkish reason, in a shrewd

WIT-

intimation, in cunningly diverting or eleverly retorting an objection: sometimes it is couched in a bold scheme of speech, in a tart irony, in a lusty hyperbole, in a startling metaphor, in a plausible reconciling of contradictions, or in acute nonsense: sometimes a scenical representation of persons or things, a counterfeit speech, a mimical look or gesture passeth for it: sometimes an affected simplicity: sometimes a presumptuous bluntness giveth it being; sometimes it riseth from a lucky hitting upon what is strange: sometimes from a crafty wresting obvious matter to the purpose: often it consisteth in one knows not what, and springeth up one can hardly tell how."

"True wit is like the brilliant stone
Dug from the Indian mine;
Which boasts two various powers in one—
To cut as well as shine.

"Genius, like that, if polished bright,
With the same gifts abounds,
Appears at once both keen and bright,
And sparkles while it wounds."—Anon.

WIT and HUMOUR commonly concur in a tendency to provoke laughter, by exhibiting a curious and unexpected affinity; the first generally by comparison, either direct or implied, the second by connecting in some other relation, such as cansality or vicinity, objects apparently the most dissimilar and heterogeneous; which incongruous affinity gives the true meaning of the word oddity, and is the proper object of laughter."—Campbell, Phil. of Rhet., bk. i. eh. 2, sec. 2.

"The feeling of the *ludicrous* seems to be awakened by the discovery of an unexpected relation between objects in other respects wholly dissimilar."—M'Cosh, *Typical Forms*, bk. iii. ch. 2, see. 5.

Dr. Trusler says that wit relates to the matter, humour to the manner; that our old comedies abounded with wit, and our old actors with humour; that humour always excites laughter, but wit does not; that a fellow of humour will set a whole company in a roar, but that there is a smartness in wit, which cuts while it pleases. Wit, he adds, always implies sense and abilities, while humour does not; humour is chiefly relished by the vulgar, but education is requisite to

#### WIT and HUMOUR-

comprchend wit.—Taylor, Synonyms; Barrow, vol. i. scrmon

14.; Kames, Criticism, ch. xiii.

Lord Shaftesbury has an Essay on the Freedom of Wit and Humour—Characteristicks, vol. i.; Spectator, No. 58-63; Sydney Smith, Mor. Phil.; Thackeray's Humourists; Ben Jonson, Every Man in his Humour; S. Bailey, Discourses Literary and Philosophical, 1852.

Sir Henry Bulwer, in France, Social, Literary, and Political,

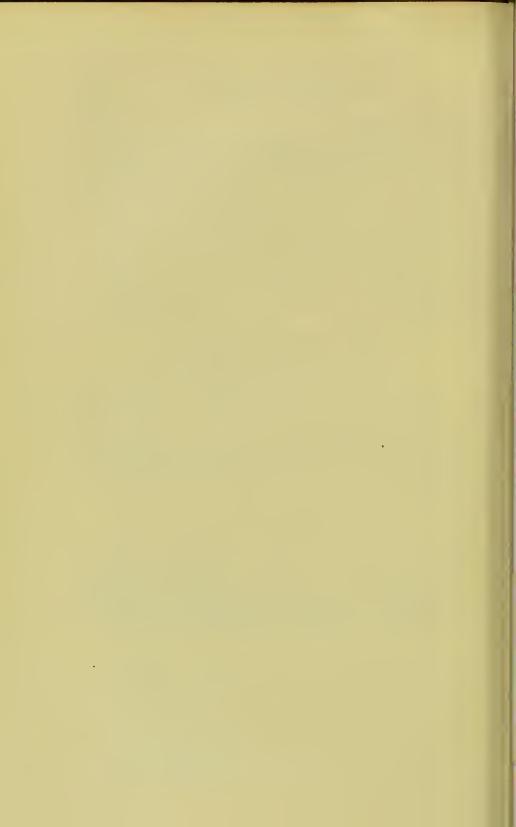
has a chapter on Wit.

According to Sydney Smith, "the feeling of wit is occasioned by those relations of ideas which excite surprise, and surprise alone"—

"True wit is nature to advantage dressed;
What oft was thought, but ne'er so well expressed;
Something, whose truth convinced at sight we find,
That gives us back the language of our mind."—POPE.

Aristotle (Rhet., ii. xii. 16) defines wit as "chastened insolence." And (Poet., v. 2), he says "the ludicrous consists in a thing being out of place, anomalous, ugly, and faulty, though not in such a way as to cause any sense of apprehension or pain." This definition has been made by Coleridge the text for his dissertations on wit and humour.—Literary Remains, vol. i.

ZOONOMY (ζῶον, animal; νόμος, law).—That department of know-ledge which ascertains the laws of organic life. Dr. Darwin published a well-known work under this title, in which he classifies the facts belonging to animal life, and by comparing them seeks to unravel the theory of diseases.



	Page		Page
Abduction,	1	Analogy,	$\tilde{20}$
Ability (Natural and Moral),	1	and Metaphor,	23
Abrogation,	2	and Example,	24
Abscissio Infiniti	2	and Experience,	24
Absolute,		and Induction,	25
Abstinence	$\overline{5}$	Analysis and Synthesis,	25
Abstract, Abstraction,	6	Analytics,	27
Abstractive and Intuitive,	10	and Example, and Experience, and Induction, Analysis and Synthesis, Analytics, Anima Mundi,	27
Absurd,	10	Animism, Antecedent, Anthropology, Anthropomorphism,	28
Academy,	10	Antecedent,	28
Acatalepsy,	11	Anthropology,	28
Accident,	11	Anthropomorphism,	29
Accidental,	12	Anticipation,	30
Accosmist,	12	Anthropomorphism, Anticipation, Antinomy, Antipathy, A Parte Ante, A Parte Post, Apathy,	31
Acroamatical,	12	Antipathy,	32
Act	13	A Parte Ante, A Parte Post,	32
Action,	14	Apathy,	32
Active,	15	Anhoniom	33
Activity, v. Will.		Apodeictic,	34
Act,	15	Apologue,	35
Actus Primus,	15	Apology,	25
	15	Apoleictic,	35
Adage,	15	Appearance,	36
Adept,	16	Apperception,	36
Adequate,	16	Appetite,	37
Adjuration,	16	Apprehension, Apprehend and Comprehend,	38
Admiration,	16	Apprehend and Comprehend,	38
Auditulon	17	Approbation (Moral), A Priori and A Posteriori, .	38
Adscititious,	17	A Priori and A Posteriori, .	38
Adscititious,	17	Arbor Porphyriana,	41
Actiology,	17	Archæus,	41
Affection,	17	Archelogy,	41
Affinity,	18	Archetype,	41
Affinity,	18	Archetype,	42
A Fortiori,	18	Argument,	42
Agent,	18	Argument,	43
Agnoiology,	18	Argumentation,	44
Alchemy,	19	Α nt	45
Allegory,	19	Asceticism,	47
Ambition,	19	Assent,	48
Amphibology	19	Assertion,	48
Amphiboly,	19	Assertory,	49
Amphiboly,	20	Assertory,	49

Assumption,	Page		Page
Assumption,	50	Comparison,	94
Atheism,	51	Comparison,	94
Atheist	51 52	Compassion, v. Sympathy.	
Atom Atomism	52	Complex,	94
Attention	53	Comprehension	94
Attributo	54	Compunction.	94
Authorite,	55	Consciuing and Approbabling	95
Authentic,	56	Conceiving and Appreneuding,	06
Authority (Principle of), .	56	Concept,	90
Autocrasy,	56	Conception,	91
Automaton and Automatic, .	56	Concept,	98
Antoniotion	57	Conceptualism,	99
Autonomy,	57	Conclusion,	99
Autotheists	58	Concrete,	100
Axiom.	58	Condignity, v. Merit.	
22		Condition.	100
Beauty,	. 59	Concrete, Condignity, v. Merit. Condition, Conditioned, Law of, Congruity, Connotative, Conscience, Conscience, Consciousness, Consent, (Universal), Consequent, Consilience of Inductions, Constitutive, Coutemplation, Contineuce, Contingent, Coutinuity (Law of), Contract, Contradiction (Principle of), Contraries, Conversion, Coppla, Corollary, Cosmology, v. Metaphysics, Craniology, v. Phrenology, Cranioscovy, v. Organ.	101
Poince	60	Congruity	101
Delig,	61	Connectative	101
Bellei,	61	Connotative,	101
Benevolence,	63	Consangumity,	102
Biology,	63	Conscience,	102
Blasphemy,	. 63	Consciousness,	104
Body,	64	Consent,	109
Bonum	64	(Úniversal),	109
Morale	65	Consequent,	109
Summum	65	Consilience of Inductions	109
Brosed	65	Constitutive	110
Diocard,		Contemplation	110
Constantly win	66	Continuos.	110
Cænestnesis,	. 00	Continence,	110
Capacity,	. 00	Contingent,	111
Cardinal Virtues, .	. 67	Continuity (Law of),	112
Casuistry,	. 68	Contract,	113
Catalepsy,	. 68	Contradiction (Principle of), .	113
Categorematic,	. 69	Contraries,	114
Categorical, v. Proposition.		Conversion,	115
1mperative.	. 69	Coppla	115
Category	. 70	Corollary.	116
Cauca	72	Cosmogony	116
Canality	$\frac{7}{4}$	Cosmology a Metaphysics	
Causanty,	7.1	Craniology, v. Metaphysics. Craniology, v. Phrenology. Cranioscopy, v. Organ. Creation, Criterion, Critique, Cumulative (The Argument), Custom, Cynic,	
Cansation,	. (±	Chanismany a Organ	
Causes (Final),	. 10	Cramoscopy, v. Organ.	117
(Occasional),	. 80	Creation,	11/
Certainty, Certitude, .	. 80	Credulity,	11/
Chance,	. 84	Criterion,	117
Chances (Theory of), .	. 85	Critique,	118
Charity.	, 85	Cumulative (The Argument),	119
Chastity	. 86	Custom.	119
Choice	86	Cynic	120
Charactistics	87	Cyme,	
Cirilitae Countries	. 97	Demonist	120
Clarify, Courteousness,	. 07	Detailonist,	120
Classification,	. 87	Data,	190
Cognition,	. 88	Deduction,	120
Colligation of Facts, .	. 89	De Facto, De Jure,	121
Combination and Counction	of	Definition,	121
Ideas,	. 89	Deist,	123
Cænesthesis, Capacity, Cardinal Virtues, Casuistry, Catalepsy, Categorematic, Categorical, v. Proposition. Imperative, Category, Cause, Causality, Cansation, Causcs (Final), (Occasional), Certainty, Certitude, Chance, Chances (Theory of), Charity, Choice, Chrematistics, Civility, Courteousness, Civility, Courteousness, Civility, Courteousness, Consisting Cognition, Colligation of Facts, Combination and Councetion Ideas, Common Sense, (Philosophy of)	. 91	Demiurge,	124
Ideas,	92	Dæmonist,	125
Common, v. Term.	. 92	Demonstration	125
Committee to a committee			

	Page		Page
Denomination (External), v. Moo	3	Envy, Epicheirema, Epicheirema, Epistemology, Episyllogism, Equanimity, v. Magnanimity. Equivocal, Equivocation, Error,	156
Denomination (External), v. Modernal), v. Mo	127	Epicheirema,	156
Design,	127	Epicurean,	157
Desire,	128	Epistemology	157
Destiny,	130	Episyllogism	157
Determinism,	130	Equanimity, v. Magnanimity.	
Dialectic,	130	Equity.	157
Dialectics,	131	Equivocal.	158
Dianoiology, v. Noology.		Equivocation	158
Dichotony,	132	Equivocation, Error, Esoteric and Exoteric, Essence, Eternity, of God, Ethics, Ethnology, Endæmonism, Euretic or Euristic, v. Ostensive	160
Dictum de Omni et Nullo	133	Esoteric and Exoteric	160
Simpliciter,	133	Essence.	160
Difference,	133	Eternity.	162
Dilemma,	134	of God.	163
Discovery, v. Invention.		Ethics.	163
		Ethnology,	164
Disjunctive, v. Proposition.		Endamonism.	164
Disposition,	135	Euretic or Euristic, v. Ostensive	9.
Distinction,	136	Evidence.	165
Distribution,	137	Evidence,	166
Ditheism,	137	Evil. Origin of.	166
Division,	137	Example, v. Analogy,	100
Divorce,	139	Excluded Middle.	167
Dogma,	139	Existence	167
Dogmatism,	139	Exoteric, v. Esoteric.	10,
Doubt,	139	Expediency (Doctrine of).	167
Dreaming,	140	Experience.	169
Dualism, Duality,	141	Experiment	172
Duration,	142	Evidence, Evil, Evil, Origin of, Example, v. Analogy. Excluded Middle, Existence, Exoteric, v. Esoteric. Expediency (Doctrine of), Experience, Experiment, Experimentum Crucis, Extension, Externality or Outness,	172
Duty,	142	Extension.	172
Dynamic,	142	Externality or Outness.	174
Dynamism,	142		-, -
Disjunctive, v. Proposition. Disposition, Disposition, Distribution, Distribution, Ditheism, Division, Divorce, Dogma, Dogmatism, Doubt, Dreaming, Dualism, Duality, Duration, Duty, Dynamic, Dynamic, Dynamic, Dynamism,		Fact	174
Eclecticism,	142	Factitious	174
Economics,	144	Faculty.	175
Ecstacy,	145	Faculties of the Mind	178
Education,	145	Faith, v. Belief.	~, 0
Effect,	146	Fallacy.	181
Ego,	146	Fallacia Æquivocationis.	181
Egoism, Egoist,	147	Amphibolie.	181
Election,	147	Compositionis.	181
Element,	148	Divisionis.	181
Elementology, v. Methodology.		Accentus.	181
Elicit,	149	Figuræ Dictionis.	181
Elimination,	149	Accidentis.	182
Emanation,	149	A Dicto Secundum quid	102
Emotion,	149	ad Dictum Simpliciter.	182
Empiric, Empiricism,	150	Ignorationis Eleuchi.	182
Emulation,	152	A non Causa pro Causa.	182
End,	152	Experiment, Extension, Extension, Externality or Outness,  Fact, Factitious, Faculty, Faculties of the Mind Faith, v. Belief. Fallacy, Fallacia Æquivocationis, Amphiboliæ, Compositionis, Divisionis, Accentus, Figuræ Dictionis, Accidentis, A Dicto Secundum quid ad Dictum Simpliciter, Ignorationis Elenchi, A non Causa pro Causa, Consequentis, Petitionis Principii, Plurium Interrogationum,	182
Endogamons,	152	Petitionis Principii	182
Ens,	153	Plurium Interroga-	102
Entelechy,	153	tionum.	183
Enthusiasm,	155	False, Falsity.	183
Enthymenie,	156	Fancy.	181
Empiric, Empiricism, Emulation, End, End, Endogamons, Ens, Entelechy, Enthusiasm, Enthymenie, Entity, Enninciation,	156	Plurium Interrogationum, False, Falsity, Fancy, Fatalism, Fate, Fear,	186
Enunciation,	156	Fear,	187
			TOI

	Page 1		Page
Feeling,	187	Ideology or Idealogy	-227
Fetichism.	189	Idiosyncrasy	228
Figure a Syllogism		1401	228
First Conce	190	Ignorance	220
Fecling, Fetichism, Figure, v. Syllogism. First Cause, Fitness and Unfitness, Force, Form, Fortitude, Free-Thinker, Free Will, Friendship, Function,	100	Illation	990
Fitness and Unitness,	190	Tilation,	520
Force,	191	Illuminati,	230
Form,	191	Illusion,	230
Fortitude,	194	Imitation,	234
Free-Thinker,	191 194 194 195 195	Imagination,	230
Free Will.	195	Immanence,	234
Friendship	195	Immanent.	234
Wungtion	105	Immatorialism	935
runction,	199	Turnotoniolitza	200
0 1 1	700	Immaterianty,	200
Generalization,	196	Immediate, 1.	230
Generalization, General Term, v. Term.		Immortality (of the Soul), .	236
General Term, v. Term. Genius, Genuine v. Authentic. Genus,	197	Immutability,	-236
Geuuine v. Authentic.		Impenctrability,	-237
Genus	200	Imperate, v. Elicit, Act.	
Gnome	201	Imperative	237
Cod.	201	Imporative Categorical	937
Cool (Mho Chi-A	201	Imperative, Categorical,	933
Good (The Chief),	201	Impossible,	200
Grammar (Universal),	202	Impression,	200
Grandeur,	203	Impulse and Impulsive,	. 239
Genus,	203	Imputation,	239
Gymnosophist,	204	Inclination,	239
		Indefinite,	240
Habit.	204	Indifference (Liberty of),	240
Hanniness	206	Indifferent Action.	240
Hellusination	206	Indiscernibles (Identity of)	240
Habit,	208	Ideology or Idealogy.  Idiosyncrasy, Idol, Ignorance, Illation, Illusion, Illuminati, Illusion, Imitation, Imigination, Imagination, Immanence, Immanent, Immaterialism, Immateriality, Immediate, Immortality (of the Soul), Immutability, Imperato, v. Elicit, Act. Imperative, Imperative, Categorical, Impossible, Impussion, Impulse and Impulsive, Imputation, Indefinite, Indifference (Liberty of), Indifferent Action, Indiscernibles (Identity of), Individual, Individual, Individual, Indertia, In Esse, In Posse, Inference, and Proof, Iufinite, Influx (Physical), Injury, Innate Ideas, Instinct, Intellect and Intelligence, Intellect and Intelligence, Intellect or Intention, Intertian Interiory	911
Harmony (Fre-established), of the Spheres,	200	Tadicidae lites	919
of the Spheres,	209	Thaividuanty,	0.19
Hate,	209	Induction (Process of),	240
Hedonism,	209	(Principle of),	240
Hermetic Books,	209	Inertia,	245
Heteronomy, Heuristic, v. Ostensivc. Holiness, Homologue,	216	In Esse, In Posse,	246
Henristic, v. Ostensive,		Inference	246
Holiness	210	and Proof	247
Homologue	210	Infinite	247
Homonymous, v. Equivocal.	210	Influx (Physical)	249
Homonymous, v. Equivocai.	211	Initial (Thysical),	919
Homotype,	211	Injury,	9.10
Hinmour,	211	innate ideas,	051
Hylozoism,	211	Instinct,	201
Hypostasis, v. Subsistentia.		Intellect,	204
HVDOLHESIS	211	Intellect and Intelligence, .	255
Hypothetical, v. Proposition.		Intellectus, Patiens, Agens, .	-256
		Intent or Intention, Intention (Logical),	257
I, v. Ego, Subject.		Intention (Logical)	:257
Llos	913	(First and Second).	258
Idea,	990	Interpretation of Nature	258
The later with	000	Intuition	250
Ideal Legality,	225	Intention (Logical), (First and Second), Interpretation of Nature, Iutuition, and Conception, Invention, Irony, Irony, Irony, Irony, Irony	961
Idealism,	223	and Conception, .	201
Idealist,	224	Invention,	201
Ideation and Ideational,	224	Irony,	262
Identical Proposition,	225		
Identism or Identity.	225	Judgment,	262
I, v. Ego, Subject. Idea, Ideal, Ideal Legality, Idealism, Idealist, Ideation and Ideational, . Identical Proposition, . Identism or Identity, (Personal), (Principle of),	226	Judgment, Jurisprudence, Justice,	264
(Principle of)	227	Justice.	267
(I IIII or pic or),		0 11009	

	Page	Moral Sense,	Page
Kabala, Knowledge, Knowledge as Intuitive or	268	Moral Sensc,	315
Knowledge,	269	Morphology,	-315
Knowledge as Intuitive or		Motion,	315
Symbolical,	271	Motive,	316
as Immediate, etc	271	Mysticism,	320
Knowledge as Intuitive or Symbolical, as Immediate, etc., .		Myth and Mythology	321
Language, Latent Modifications of Mind, Laughter,	272	Natura, v. Nature. Natural, Naturalism, Nature,  (Course of), (Plastie), (Philosophy of), (Law of), (of Things), (Human), Necessity, (Doctrine of), (Logical), Negation, Nihilism, Nihilum or Nothing, Noninalism, Nomology, Non Sequitur, Noogonie, Noology, Norm, Notion, First and Second, Intuitive & Symbolical, Notiones Communes, Noumenon, Novelty, Number,	
Latent Modifications of Mind.	273	Natura, v. Nature.	
Laughter	273	Natural	322
Law	273	Naturalism	323
and Cause	274	Nature	324
Physical Mantal Moral	2/1	(Course of)	325
Political	976	(Plastia)	396
and Form	977	(Philosophy of)	296
/Funivical	977	(I mosophy or),	207
Tampingan),	977	(Liaw OI),	900
Lemma,	079	(Uranas),	990
Libertarian,	070	(Human),	529
Liberty of Will,	2/0	Necessity,	329
Life,	280	(Doctrine of),	331
Logic,	282	(Logical),	332
Love,	284	Negation,	332
	00=	Nihilism,	333
Macrocosm and Microcosm, .	285	Nihilum or Nothing,	333
Magic,	286	Nominalism,	333
Magnanimity and Equanimity,	286	Nomology,	334
Magnetism,	287	Non Sequitur,	334
Manicheism,	287	Noogonie,	334
Materialism,	288	Noology,	334
Mathematics,	288	Norm, ,	335
Matter,	289	Notion,	335
and Form,	290	First and Second	337
Maxim,	291	Intuitive & Symbolical.	338
Memory,	291	Notiones Communes.	339
Mental Philosophy	295	Noumenon	339
Merit.	296	Novelty	340
Mesmerism	297	Number	310
Metaphor.	297		910
Metaphysics.	298	Oath	240
Metempsychosis	303	Objective	911
Method	303	Obligation	510
Methodology	306	(Morel)	940
Metonomy	306	Observation	047
Microcosm a Macrocosm	300	Oath,	044
Mind	306	Occasional Garage Garage	240
Miraalo	907	Occasional Causes, v. Causes.	
Modelity	307	occurred questioners, o. question.	
Modally,	307	One, v. Unity.	
Mode,	308	Onciromancy, v. Dreaming.	
Magnetism, Manicheism, Materialism, Materialism, Mathematics, Matter, and Form, Maxim, Memory, Mental Philosophy, Merit, Mesmerism, Metaphor, Metaphor, Metaphysics, Metempsychosis, Methodology, Metonomy, Microcosm, v. Macrocosm. Mind, Miracle, Modality, Mode, Molecule, Monad, Monadology, Monism, Monogamy, Monotheism, Mood, v. Syllogism. Moral, Faculty, v. Conscience.	309	Ontology, v. Dreaming. Ontology,	346
Monadology,	310	Operations of the Mind,	348
Monism,	311	Opinion,	348
Monogamy,	312	Opportunity,	349
Monotheism,	312	Opposed, Opposition,	349
Mood, v. Syllogism.		Opposition (in Logic),	349
Moral,	312	Optimism,	350
Faculty, v. Conscience.		Order,	351
Morality,	313	Organ,	352
Moral Philosophy.	314	Organization	252

			Page		Page
Organon or Organus	n, .		353	Premiss,	382
Origin,			353	Prescience,	382
Origin, Originate, Originate, Originate, Origination Ostensive, Outy Outness,	011.		354	Presentative, v, Knowledge.	
Ostensive			354	Primary,	383
Qualituess a Duty			00	Principia Essendi	383
Outness, o. Duy	•		354	Primary, Principia Essendi, Principle, Principles of Knowledge, Express or Operative,	383
Outliess,	•	•	001	Principles of Knowledge	900
				Francis or Change, .	904
Pact. v. Contract, P			955	Express or Operative, .	666
Palætiology, Palingenesia, v. M			355	OI ACTION,	385
Palingenesia, v. A	reten	apsy-		Express or Operative, of Action, Privation, Probability, v. Chances. Probable, Probation, Problem, Progress, v. Perfectibility. Promise and Pollicitation, Proof,	350
chosis.				Probability, v. Chances.	
Pantheism,			355	Probable,	387
Parable,			356	Probation,	389
Paradox,			356	Problem,	389
Paralogism,			356	Progress, v. Perfectibility.	
of Pure Reas	on		357	Promise and Pollicitation.	389
Pareimony (Law of)			357	Proof,	390
Paronymous & Co	ານຳນາດຄ	te		Proof,	390
Part	nj 1180		357	Property; (Generic), (Specific) Proposition, Propriety, Proprium, Prosyllogism, v. Epicheirema.	390
Part,	,	•	358	(Chapital	390
Danier Description	•	•	950	December	391
Passion,	•		950	Proposition,	909
Passions (The), .			598	Propriety,	392
Passive,			358	Proprium,	392
Perception,			359	Prosyllogism, v. Epicheirema.	000
Perceptions (Obscur	re), .		360	Proverb,	392
Perfect, Perfection,			363	Providence,	393
Perfectibility, F.			363	Prudence,	394
Peripatetic			364	Physic and Physical,	395
Person, Personality	· .		365	Proverb,	395
Petitio Principii	, .		366	Psychology	395
Phenomenology	·	-	366	Psychonanuvchism.	397
Phenomenon	•	•	366	Pure,	397
Philanthrony	•		367	Pyrrhonism, v. Academics,	001
Dhilosopher	•	•	368	Scepticism.	
Differential	•	,	970	Scepholain.	
Philosomatist, .		•	970	O Intrinse of Maintena	
Phrenology, .		•	370	Quadrivium, v. Trivium. Quality,	900
Physiognomy,			3/1	Quality,	398
Physiology and Ph	ysics,		3/2	(Occult),	399
Picturesque, .			3/2	CHERTELLY	3(11)
Plastic Medium, .			373	(Discrete,) &c., Quantification of the Predicate	400
Pneumatics,			. 373	Quantification of the Predicate	e, 401
Pneumatology, .			. 373	Quiddity,	402
Poetry or Poesy.			. 374	Quictism,	402
Polygamy.			374		
Polytheism			375	Race, v. Species.	
Positive			375	Ratio	403
Positiviem		•	375	Ratiognation	403
Positivism,		•	276	Rationale	403
Doctolete			. 970 977	Pationalism	404
rostmate, .	•	,	. 911	Deal	404
Potential,			. 3/8	Real,	405
Potentiality, v. Cal	pacity	7.	0.00	Keansm,	405
Power,			. 378	Reason,	405
Practical, .			. 380	(Spontancity of),	407
Prædicate,			. 380	and Understanding, .	407
Prædicament,			. 381	(Impersonal),	411
Part, Parthenogenesis, Passion, Passions (The), Passive, Perception, Perceptions (Obscu Perfect, Perfection, Perfectibility, Peripatetic, Person, Personality Petitio Principii, Phenomenology, Phenomenon, Philanthropy, Philosophy, Philosophy, Philosomatist, Phrenology, Physiognomy, Physiognomy, Physiognomy, Physiology and Ph Picturesque, Plastic Medium, Pneumatics, Pneumatology, Poetry or Poesy, Polygamy, Polytheism, Possitive, Postivie, Postivies, Postivies, Postivism, Possible, Postnlate, Potential, Potential, Potential, Practical, Practical, Pracdicament, Pracpredicamenta Prejudice,	,		. 381	Race, v. Species. Ratio,	413
Prejudice.		,	. 381	Reasoning,	. 413
				0,	

			Page	1			D.,
Recollection, v.	Remer	mbrance		Sin, v. Evil.			Page
Recollection, v. Rectitude, Redintegration, Reduction in Lo Reflection, Sense, Regulative, Relation, Relative, Relative, Relativety of H ledge,	10011101		414	Sincovity			457
Redintegration	•	•	416			•	. 451
Reduction in Lo	orio.		410	Singiliar, v. Tel	rm.		
Reflection	S10,	•	416	Socialism,	•	•	. 451
Reflex Action	•		417	Socialism, Society (Desire (Political	01),	. (2)	. 451
Conse	•	•	418	(Political	Capaci	ity of),	453
Dense,	•		418	1.8001010077			. 453
Regulative,			418	Somatology, v.	Nature.		
Relation, .			418	Somnambulism,			453
Relative,			420	Somnambulism, Sophism, Sophi	ster. Sc	phisti	cal. 453
Relativity of H	uman	Know-		Sorites, Soul,		1	454
ledge, Religion, Remembrance, Renuiniscence			420	Soul.			45.1
Religion,			422				1.0
Remembrance,			422	Space	29 0. 2111.	111150 741	иниг. . 459
Reminiscence.			423	Space, Species,			400
Reminiscence, Representative,	v. Kno	wledge	120	opecies,	4inm	•	402
Resentment, Retention, Right, Romantic, Rosicrucians, Rule,	0, 11110	micago.	496	Specification (De	tion,	• • •	404
Retention	•		406	Specification (Pr	rinciple	01),	466
Right.	•		420	(Process o	01),		466
Romantio .	•	•	427	Speculation,			-466
Roginanciona	•	•	429	Spirit, v. Soul.			
Pulo	•	•	429	Spiritualism,			467
ruie, .			430	Spontaneity,			467
CI-1				Spontaneous,			468
Sabaism, .			430	Standard of Virt	ue.		468
Sanie,			431	States of Mind.	,		468
Sanction, .			431	Statistics.			470
Savage and Barb	arous,		432	Stoics.	•		471
Scepticism,			432	Subject. Object	•		470
Schema, .			434	Space, Species, in Percep Specification (Pr (Process of Speculation, Spirit, v. Soul. Spiritualism, Spontaneity, Spontaneous, Standard of Virt States of Mind, Statistics, Stoics, Subject, Object, Subject, Object, Subjectivism, Sublime (The), Snbsistentia, Snbstance, (Principle Subsumption, Succession, Sufficient Reason Suggestion, Sufficient Reason Suggestion, Suicide, Superstition, Supernatural, Supernatural, Supernatural, Supra-Naturalism Syllogism, Symbol, v. Myth Sympathy, Syncategorematic	•		472
Scholastic, .			434	Sublime (The)	•		470
Scholastic Philos	opliv.		434	Subsistentia	•		4/4
Science, .	-155		436	Substance.	•		4/4
Sciences (Occult)		•	438	Ditustance,	* C -		474
Scientia (Media)	, •		428	(Frinciple	01),		475
Sciolist.	20		456	Subsumption,			476
Sciomachy			490	Succession,			476
Secularien	•		459	Sumcient Reason	1,		476
Soundanism, Ould			439	Suggestion, .			477
Self Congainment,		•	439	Suicide, .			479
Solf-Consciousnes	58,	•	439	Superstition,			479
Semsuness, .		•	439	Supernatural,			479
Self-Evident,			440	Supra-Naturalism	11		480
Sell-love,			440	Syllogism, .			480
Sematology,			441	Symbol, v. Myth		•	400
Sensation, .			441	Sympathy	•		481
and Percep	tion,		442	Sympathy, Syncategorematic	·	tamana	401
Sensationalism,			414	matic.	, c. Ca	tegore.	
Sense,			444	Syncroticm			400
Senses (Reflex),			444	Syndorogia.	•		482
Rule,  Sabaism, Same, Sanction, Savage and Barb Scepticism, Scholastic, Scholastic, Scholastic Philos Science, Sciences (Occult) Scientia (Media), Sciolist, Sciomachy, Secularism, Secularism, Secularism, Secularism, Secularism, Secularism, Sesuff-Consciousnes Selfishness, Self-Evident, Self-Iove, Sematology, Sensation, and Percep Sensationalism, Sense, Sense (Reflex), Sensiblity, Sensibles, Commo Sensism, Sensuali Sensorium,			445	Synderesis, .			482
Sensibles. Commo	on and	Proper	445	Syntagesis, .			482
Sensism, Sensuali	sm S	neniem	110	Syntheresis, .			483
Sensorium	om, De	usuisin,	440	Synthesis, .			483
Sensus Communic	* '	•	446	System, .			483
Sentiment	'? .	•	447	Economy,			484
and Onini-		•	447	Syncretism, . Synderesis, . Syneidesis, . Synteresis, . Synthesis, . System, . Economy,			
Sign and Opinio	п, .	•	449	Tabula Rasa,			484
Simile of Mark			449	Tact,			485
Sensorium, Sensuan Sensorium, . Sensus Communis Sentiment, . and Opinio Sign, Simile, v. Metaph	or.			Tabula Rasa, Tact, Talent,			485

			Page					Page
m			185	Transmigration	22	Meter	mn-	Lago
Taste, . Teleology, .	•	•	187	sychosis.	1, 0+	1.1000	-P	
Teleology,	•	•	487	Transposition,	22 Co	nversi	on	
Temperament,		•	489	Trivium	<i>v</i> . Co.	посты	он.	506
Temperance,		•	489	Truth.	•	•	•	506
Tendency, .	•	•	489	Vonitas	Entie	•	•	506
Term, (Absolute),	•		490	Comitio	mis	, .	•	506
(Absolute),	•		490	Trivium, Truth, Veritas Cognitio Signi, Truths (First), Type,	,,,,,	•	•	507
(Abstract),		•	490	Tmthe / Kiret	•	•	•	509
(Common),		•	498	Trucks (First),	•	•	•	511
(Complex),		٠	490	1 y pc,	•	•	•	011
(Concrete),		•	490	Hilliota				511
(Contrary),			490	Ubiety, Unconditioned Understanding Unification,	•	•	•	512
(Definite),				Unconditioned	, ,	•	•	512
(Indefinite)	,• •		490	Understanding	, .	•		514
(Negative),			490	Unification, .			•	514
(Opposite), (Positive),			490	Unitarian, .	000	•	•	515
(Positive),		•	491	Unity or Onen Universals, . Universal, . Univocal Word	ess,	•	•	516
(Privative),			491	Universals, .	•	•	•	516
(Relative),	•	•	491	Universal Way	da .	•	•	517
(Simple), (Singular,		•	491	Univocal Word	us, .	•		519
(Singular,		•	491	Utility, .		•	•	910
Terminists, v. No.	minalism.		407	37 - 17 - 24 - 4				519
Testimony, .			491	Velleity, . Veracity, . Verbal, .		•	•	510
Theism, .	•		492	veracity, .	•	•	•	510
Theodicy, . Theodicy, . Theogony, . Theology, . Natural,		٠	494	verbal,		•		520
Theodicy, .		•	494	Virtual, Virtue, Volition,	•	•		520
Theogony, .			495	Virtue,			•	591
Theology, .			496	volition, .	•	•	•	UAL
Natural,		•	497	337-11 1ing				522
Theopathy, Theory, Theosophism, Th			701	Well-being, .	•	•	•	500
Theory,			497	W 1101e,			•	593
Theosophism, Th	eosophy,	•	498	Why	•	•		59.1
Thesis, Thought and Thi	2.		499	Whole, Whole, Why? Will, Will (Freedom Wisdom, With	n 061		•	596
Thought and Thi	nking,		499	Will (Freedon	n 01),		•	509
Time			500	Wisdom, .	•		•	520
Topology, v. Mer	noria Tecl	mic	ea.	Wit, Wit and Hum		•	•	520
Tradition			106	Wit and Hum	iour,			990
Train of Thought	t		502	F7				531
Transcendent, Transference, Tr	ranscender	ital,	, 505	Zoonomy,		•		991
Transference, Tr	anslation,		505					

# CATALOGUE

OF

# STANDARD WORKS

Published by

# CHARLES GRIFFIN & COMPANY.

	I.—Religious Works			•	•			PAGE 2
	II.—Scientific "			,	•			8
]	III.—Educational ,,	•	•	•		•	•	18
	IV.—Belles Lettres and I	llus	trate	d W	orks			24
	V.—Works of General Ir	itere	est ar	nd U	ility			30

London:

10, STATIONERS' HALL COURT.

# Charles Griffin & Company's LIST OF PUBLICATIONS.

# Religious Works.

ALTAR OF THE HOUSEHOLD (The); a Series of Prayers and Selections from the Scriptures, for Domestic Worship, for every Morning and Evening in the year. By the Rev. Dr. Harris, assisted by eminent Contributors, with an Introduction by the Rev. W. Lindsay Alexander, D.D. New Edition, entirely revised. Royal 4to, with Steel Frontispiece. Cloth, gilt edges, 22/- May also be had bound in the following styles: half-bound calf, marbled edges; full calf, gilt edges; and levant morocco, antique, gilt edges.

\*\* To the New Edition is added "The Sunday Preacher and Teacher for Young People," by the Rev. Robert Jamieson, D.D.

ALTAR OF THE HOUSEHOLD (The), Illustrated with a series of first-class Engravings on Steel, descriptive of the most important Events in the Old and New Testaments. Royal 4to. Cloth, gilt edges, 28/- Also in the following styles: half-bound calf, marbled edges; full calf, gilt edges; and levant morocco, antique, gilt edges.

\*\*\* Presentation Copies of the above, bound to order when required, with Name and Inscription on side.

ANECDOTES (CYCLOPÆDIA of RELIGIOUS and MORAL). With an Introductory Essay by the Rev. George Cheever, D.D. Crown 8vo. Cloth, 3/6. Sixteenth Thousand.

\* \*\* These Anecdotes relate to no trifling subjects; and they have been selected, not only for amusement, but for instruction. By those engaged in the tuition of the young, they will be found highly useful.

BIBLE HISTORY (A Manual of). By the Rev. J. Wycliffe Gedge. Small 8vo. Cloth neat, 7d.

"This small but very comprehensive Manual is much more than a mere summary of Bible History."—Church Sunday School Magazine.

### BUNYAN'S PILGRIM'S PROGRESS. With

Expository Lectures by the Rev. ROBERT MAGUIRE, Incumbent of Clerkenwell. With Steel Engravings. Imperial 8vo. Cloth gilt, 10/6. Second Edition.

#### BUNYAN'S PILGRIM'S PROGRESS. With

Life and Notes, Experimental and Practical, by WILLIAM MASON. Printed in large type, and Illustrated with full-page Woodcuts. Crown 8vo. Bevelled boards, gilt, and gilt edges, 3/6. Tenth Thousand.

### BUNYAN'S SELECT WORKS. With an Ori-

ginal Sketch of the Author's Life and Times. Numerous Engravings. Two vols., super-royal 8vo. Cloth, 36/- New Edition.

### CHRISTIAN YEAR (The): Thoughts in Verse

for the Sundays and Holy Days throughout the Year. With an original Memoir of the Rev. John Keble, by W. Temple, Portrait, and sixteen beautiful Engravings on Steel, after eminent Masters. In 4to, handsome cloth, bevelled, 12/6; unique walnut boards, 21/-; morocco antique, 25/-; morocco extra, 30/-

ILLUSTRATIONS.

The Old Mansion..after C.W.RADCLYFFE.
The Cathedral Choir
Sunset(after CLAUDE)
Moonlight...
Pastoral Landscape
Halt in the Desert
Guardian Angels..
The Church Gate

The Cathedral C.W.RADCLYFFE.
G.W.RADCLYFFE.

"An Edition de luxe, beautifully got up.....admirably adapted for a gift-book."— John Bull.

## CHRISTIAN YEAR (The). With Memoir of the

Author by W. Temple, Portrait, and Eight Engravings on Steel, after eminent Masters. Small 8vo, toned paper. Cloth gilt, 5/-; morocco, elegant, 10/6; unique malachite boards, 12/6. New Edition.

 $^*{}_{\star}{}^*$  The above are the only issues of the "Christian Year," with Memoir and Portrait of the Author. In ordering, Griffin's Editions should be specified.

#### CREATION'S TESTIMONY TO ITS GOD:

the Accordance of Science, Philosophy, and Revelation. A Manual of the Evidences of Natural and Revealed Religion; with especial reference to the Progress of Science and Advance of Knowledge. By the Rev. Thomas Ragg. Revised and enlarged, with new Appendix on Spectrum Analysis. Large crown 8vo. Handsome cloth, bevelled boards, 5/Twelfth Edition.

"We are not a little pleased again to meet with the author of this volume in the new edition of his far-famed work. Mr. Ragg is one of the few original writers of our time to whom justice is being done."—British Standard.

[This work, originally published in 1855, has now, almost without effort or advertisement, reached its twelfth edition. It has been pronounced "The book of the age," "The best popular Text Book of the Sciences," and "The only complete Manual of Religious Evidence Natural and Revealed."]

# CRUDEN'S COMPLETE CONCORDANCE TO THE OLD AND NEW TESTAMENTS, AND THE BOOKS CALLED APOCRYPHAL. Edited and corrected by WILLIAM YOUNGMAN. With fine Portrait of CRUDEN. Imperial 8vo. Cloth, handsome gilt top, 7/6. New Edition.

# CRUDEN'S CONCORDANCE TO THE HOLY SCRIPTURES. By the Rev. John Eadle, D.D., LL.D. With Portrait

on Steel, of ALEXANDER CRUDEN, M.A., and an Introduction by the Rev. Dr. King. Post 8vo. Cloth, 3/6; half-bound calf, 6/6; full calf, gilt edges, 8/6; full morocco, gilt edges, 10/6. Thirty-ninth Edition.

\*,\* This has long and deservedly borne the reputation of being the completest and best edition extant, and the present reduction in price will also cause it to be by far the cheapest published.

# D'AUBIGNE (Dr. Merle): HISTORY OF THE REFORMATION. In one large volume, 4to. Comprising the Author's latest additions and a new Preface, with 200 Woodcuts and 12 beautiful Engravings on Steel, illustrative of the LIFE OF LUTHER, after LABOUCHÈRE. Price 21/-, elegantly bound in cloth.

\*\*\* In this edition the principal actors and scenes in the great Drama of the Sixteenth Century are brought vividly before the eye of the reader, by the skill of the artist and engraver.

### DR. DICK'S POPULAR WORKS.

# DICK (Thos., LL.D.): CELESTIAL SCENERY; or, The Wonders of the Planetary System Displayed, including all new Discoveries. This work is intended for general readers, presenting to their view, in an attractive manner, sublime objects of contemplation. Illustrated. Crown 8vo, toned paper. Handsomely bound, with gilt edges, 5/- New Edition.

DICK (Dr.): CHRISTIAN PHILOSOPHER (The); or, The Connection of Science and Philosophy with Religion. Revised and enlarged. Illustrated with 150 Engravings on Wood. Crown 8vo, toned paper. Handsomely bound, with gilt edges, 5/-Twenty-eighth Edition.

DICK (Dr.): SIDEREAL HEAVENS (The). and other Subjects connected with Astronomy, as illustrative of the Character of the Deity, and of an Infinity of other Worlds. Illustrated. Crown 8vo, toned paper. Handsomely bound, with gilt edges, 5/-New Edition.

#### STANDARD WORKS by the REV. JOHN EADIE, D.D., LL.D.

EADIE (Rev. Prof.): BIBLICAL CYCLOPÆDIA

(A); or, Dictionary of Eastern Antiquities, Geography, Natural History, Sacred Annals and Biography, Theology, and Biblical Literature, illustrative of the Old and New Testaments. With Maps prepared expressly by Messrs. W. & A. K. Johnston, many Engravings, and Lithographed Fac-simile of the recently discovered Moabite Stone, with Translation of the Inscription. Large post 8vo, 700 pages. Handsome cloth, 7/6; half-bound calf, 12/-; morocco antique, 16/-Seventeenth Edition.

"It gives, within a moderate compass, a great amount of information, accurate and well put together. The article on 'Creation,' with its survey of the question as it stands between Science and the Mosaic Cosmogony, may be cited as a specimen of the candour and liberality with which the editor has done his work."—Spectator.

"We must regard this Bible Dictionary of Dr. Eadie's as decidedly the best adapted for popular use, and have always found it a reliable authority. To the Clergy not possessed of large libraries, and to whom the price of books is important, we can cordially recommend the present volume."—Clerical Journal.

## EADIE (Rev. Prof.): CLASSIFIED BIBLE

(The). An Analysis of the Holy Scriptures. Illustrated with Maps. Post 8vo. Handsome cloth, antique, 8/6; morocco, 17/6. Fourth

"It is an attempt so to classify Scripture under separate heads as to exhaust its contents. The reader will find, under the respective Articles or Sections, what the Bible says on the several subjects in relation to Doctrine, Ethics, and Antiquities. The References are given in full."—Preface.

"We have only to add our unqualified commendation of a work of real excellence

to every Biblical student."-Christian Times.

"This massive and valuable volume requires no notice at our hands."—Edinburgh Mercury.

III.

# EADIE (Rev. Prof.): COMMENTARY ON THE GREEK TEXT OF THE EPISTLE OF ST. PAUL TO THE EPHESIANS. Revised throughout and enlarged. 8vo. Cloth, 14/-Second Edition.

"This book is one of prodigious learning and research. The author seems to have read all, in every language, that has been written upon the Epistle. It is also a work of independent criticism, and casts much new light upon many passages."—Literary Gazette.

## EADIE (Rev. Prof.): CRUDEN'S CONCORD-

ANCE TO THE HOLY SCRIPTURES. With a Portrait on Steel of ALEXANDER CRUDEN, M.A., and Introduction by the Rev. Dr. King. Post 8vo. Cloth, 3/6; half-bound calf, 6/6; full calf, gilt edges, 8/6; full morocco, gilt edges, 10/6. Thirty-ninth Edition.

<sup>\*\*\*</sup> This has long and deservedly borne the reputation of being the completest and best edition extant, and the present reduction in price will also cause it to be by far the cheapest published.

## EADIE (Rev. Prof.): A DICTIONARY OF THE

HOLY BIBLE; designed chiefly for the Use of Young Persons. From the larger work by Prof. EADIE. With Map and numerous Illustrations. Small 8vo. Cloth, 2/6; morocco, gilt edges, 7/6. Sixteenth Edition.

"Parents and tutors will unanimously thank the author for this result of a labour of love."-Critic.

"A very good and useful compilation for youth."-Literary Gazette.

VI.

## EADIE (Rev. Prof.): ECCLESIASTICAL CY-

CLOPÆDIA (The); A Dictionary of Christian Antiquities, Sects, Denominations, and Heresies; History of Dogmas, Rites, Sacraments, Ceremonies, &c., Liturgies, Creeds, Confessions, Monastic and Religious Orders, Modern Judaism, &c. By the Rev. Prof. EADIE, assisted by numerous contributors. Post 8vo. Cloth bevelled, 8,6; morocco antique, 17/6. Fifth Edition.

"This Cyclopædia will prove acceptable both to the clergy and laity of Great Britain. A great body of curious and useful information will be found in it; the aim has been to combine popularity with exactness."—Athenæum.

"Our readers will not need to be told that this is a 'comprehensive' work, and we may add that it is one which will be found useful and convenient to a large number of both clergy and laity."—English Churchman.

#### HENRY (Matthew): A COMMENTARY on the HOLY BIBLE. With Explanatory Notes. In 3 vols., super-royal 8vo. Strongly bound in cloth, 50/- New Edition.

#### THE POETICAL HERBERT (George): WORKS OF. With Memoir by J. Nichol, B.A., Oxon, Professor of English Literature in the University of Glasgow. Edited by Charles Cowden Clarke. Antique headings to each page. Small 8vo. Cloth and gold, 3/-; morocco antique, 8/-; malachite, 10/6.

# KEBLE and HERBERT: THE CHRISTIAN

YEAR, by John Keble, with Memoir of the Author by W. Temple; and THE TEMPLE, by George Herbert, with Memoir by Prof. NICHOL. In one vol., Svo, illustrated, cloth and gold, 7/6.

## KITTO (John, D.D., F.S.A.,): The HOLY LAND:

The Mountains, Valleys and Rivers of the Holy Land; being the Physical Geography of Palestine. With eight full-page Illustrations. Fcap. 8vo. Cloth, 2/6. Tenth Thousand. New Edition.

"Contains within a small compass a body of most interesting and valuable information.'

- KITTO (John, D.D., F.S.A.): PICTORIAL SUNDAY BOOK (The). Containing nearly two thousand Illustrations on Steel and Wood, and a Series of Maps. Folio. Cloth gHt, 30/. Seventy-third Thousand.
- MORRISON (Dr. J.): FAMILY WORSHIP.

  Prayers for every Morning and Evening throughout the Year. 4to.

  Cloth, gilt edges, 12/-
- PALEY (Archdeacon): NATURAL THEOLOGY; Or, the Evidences of the Existence and the Attributes of the Deity. With Illustrative Notes and Dissertations, by Henry, Lord Brougham, and Sir Charles Bell. Many Engravings. One vol., 16mo. Cloth, 4/-

"When Lord Brougham's eloquence in the Senate shall have passed away, and his services as a statesman shall exist only in the free institutions which they have helped to secure, his discourse on Natural Theology will continue to inculcate imperishable truths, and fit the mind for the higher revelations which these truths are destined to foreshadow and confirm.—Edinburgh Review.

- PALEY (Archdeacon): NATURAL THEOLOGY, with Lord Brougham's Notes and DIALOGUES ON INSTINCT. Many Illustrations. Three vols., 16mo. Cloth, 7/6.
  - \*\* This Edition contains the whole of the Original Work, published at Two Guineas, with the exception of the Mathematical Dissertations.
- RELIGIONS OF THE WORLD (The): Being Confessions of Faith contributed by eminent Members of every Denomination of Christians, also of Mahometanism, the Parsee Religion, the Hindoo Religion, Mormonism, &c., &c. Crown 8vo. Cloth bevelled, 3/6. New Edition.
  - \*\*\* In this volume, each denomination, through some leading member, has expressed its own opinions. There is no book in the language on the same plan. All other works on the subject, being written by one individual, are necessarily one-sided, incomplete, and unauthentic.
- SCOTT (Rev. Thomas): A COMMENTARY ON THE BIBLE; containing the Old and New Testaments according to the Authorised Version, with Practical Observations, copious Marginal References, Indices, &c. 3 vols., royal 4to. Cloth, 63/- New Edition.
- TIMBS (John, F.S.A., Author of "Things not Generally Known," &c.): THOUGHTS FOR TIMES & SEASONS. Selected and compiled by John Times. Fcap. 8vo. Cloth neat, 1/-Second Edition.

"In a neat and concise form are brought together striking and beautiful passages from the works of the most eminent divines and moralists, and political and scientific writers of acknowledged ability."—Edinburgh Daily Review.

# Scientific Works.

# WORKS by WILLIAM AITKEN, M.D., Edin., F.R.S.

Professor of Pathology in the Army Medical School, Corresponding Member of the Royal Imperial Society of Physicians of Vienna, of the Society of Medicine and Natural History of Dresden, and of the Imperial Society of Medicine of Constantinople.

AITKEN (Wm., M.D., F.R.S.): The SCIENCE and PRACTICE of MEDICINE. In 2 vols., demy 8vo, cloth, with a Steel Plate, Map, and nearly 200 Woodcuts. Price 38/- Sixth Edition, thoroughly revised and enlarged.

#### Press Opinions Relative to the Sixth Edition.

"The work is an admirable one, and adapted to the requirements of the Student, Professor, and Practitioner of Medicine...... Malignant Cholera is very fully discussed, and the reader will find a large amount of information not to be met with in other books, epitomised for him in this...... The part on Medical Geography forms an admirable feature of the volumes...... We know of no work that contains so much, or such full and varied, information on all subjects connected with the Science and Practice of Medicine."—Lancet.

"The extraordinary merit of Dr. Aitken's work..... The author has unquestionably performed a service to the profession of the most valuable kind. The article on Cholera undoubtedly offers the most clear and satisfactory summary of our knowledge respecting that disease which has yet appeared."—Practitioner.

"Altogether this voluminous treatise is a credit to its Author, its Publisher, and to English Physic.....Affords an admirable and honest digest of the opinions and practice of the day.....Commends itself to us for sterling value, width of retrospect, and fairness of representation."—Medico-Chirurgical Review.

"The Standard Text-Book in the English language.....There is, perhaps, no work more indispensable for the Practitioner and Student."—Edin. Medical Journal.

"We can say, with perfect confidence, that no medical man in India should be without the Sixth Edition of Dr. Aitken's 'Science and Practice of Medicine.' We say the Sixth Edition, because it is full of new matter. The article on Cholera is by far the most complete, judicious, and learned summary of our knowledge respecting this disease which has yet appeared."—Indian Medical Gazette.

# AITKEN (William, M.D., F.R.S.): OUTLINES OF THE SCIENCE AND PRACTICE OF MEDICINE. A Text-Book for Students. Crown 8vo. Cloth, bevelled, 12/6.

"So complete as to form a useful work of eference. The natural history of the principal diseases, the diagnostic signs by which they may be distinguished, together with the therapeutic indications, are concisely and systematically given. The book cannot fail to become a popular one, and we cordially recommend it to the notice of teachers and students."—Lancet.

"Well-digested, clear, and well-written; the work of a man conversant with every digested, and a thorough master of the art of teaching.—British Medical

journai.

"Students preparing for examinations will hail it as a perfect godsend for its conciseness."—Athenaum.

"In respect of both the matter contained, and the manner in which it is conveyed, our examination has convinced us that nothing could be better.....We know of no summary of the use of Electricity as a means of diagnosis equal to that contained in the Section on Diseases of the Nervous System."—Medico-Chirurgical Review.

- AITKEN (William, M.D., F.R.S.): The GROWTH OF THE RECRUIT, and the Young Soldier, with a view to the Selection of "Growing Lads" and their Training. 12mo. Cloth, 2/6.

  "This little work should be in the hands of all instructors of youth, and all em-
  - "This little work should be in the hands of all instructors of youth, and all employers of youthful labour."—Lancet.
- AITKEN (William, M.D., F.R.S.): OUTLINE FIGURES OF THE TRUNK OF THE HUMAN BODY. On which to indicate the areas of physical signs in the Clinical Diagnosis of Disease. For the use of Students and Practitioners of Medicine. 1/6.
- ANSTED (Prof., M.A., F.R.S.): GEOLOGY: A TREATISE ON. (Circle of the Sciences). Crow. 1 8vo. Cloth, 2/6.
- ANSTED (Prof., M.A., F.R.S.): NATURAL HISTORY OF THE INANIMATE CREATION, recorded in the Structure of the Earth, the Plants of the Field, and the Atmospheric Phenomena. With numerous Illustrations. Large post 8vo. Cloth, 8/6
- BAIRD (W., M.D., F.L.S., late of the British Museum): STUDENT'S NATURAL HISTORY: being a Dictionary of the Natural Sciences (Botany and Zoology). With a Zoological Chart, showing the Distribution and Range of Animal Life, and over two hundred and fifty Illustrations. Demy 8vo. Cloth gilt, red edges, 10/6.
  - "The work is a very useful one, and will contribute, by its cheapness and comprehensiveness, to foster the extending taste for Natural Science."—Westminster Review.
    "We would well recommend this volume to Students of Natural History."—Lancet.
    "Few men could be better qualified for such a task than Dr. Baird.....We can recommend it as a useful work of reference on the subject of Natural History."—Athenaum.
- BLYTH (Alexander Wynter, M.R.C.S., F.C.S., &c., Analyst to the County of Devon, and Medical Officer of Health): A DICTIONARY OF HYGIENE AND PUBLIC HEALTH. Comprising Sanitary Chemistry, Engineering, and Legislation, the Dietetic value of Foods, and the Detection of Adulterations. On the plan of the "Dictionnaire d'Hygiène Publique" of Prof. Ambroise Tardieu. In one vol., Royal 8vo, cloth, with Illustrations, Diagrams, and Map.

<sup>\* \*\*</sup> Will be published shortly, embodying the Sanitary Legislation of the Session.

- CIRCLE OF THE SCIENCES (The). A Series of Popular Treatises on the Natural and Physical Sciences, and their Applications, by Professors Owen, Ansted, Young and Tennant; Drs. Latham, Edward Smith, Scoffern, Bushnan and Bronner; Messis. Mitchell, Twisden, Dallas, Gore, Imray, Martin, Sparling and others. Complete in nine volumes. Crown 8vo. Cloth lettered. Illustrated with many thousand Engravings on Wood. 5/- each.
  - Vol. 1.—ORGANIC NATURE.—Part I. Animal and Vegetable Physiology; the Skeleton and the Teeth; Varieties of the Human Race, by Professor Owen, Dr. Latham and Dr. Bushnan.
  - Vols. 2 and 3.—ORGANIC NATURE.—Parts II. and III. Structural and Systematic Botany, and Natural History of the Animal Kingdom, by Dr. Edward Smith and William S. Dallas, F.L.S.
  - Vol. 4.—INORGANIC NATURE.—Geology and Physical Geography; Crystallography; Mineralogy; Meteorology, and Atmospheric Phenomena, by Professor Ansted, Rev. W. MITCHELL, M.A., Professor Tennant, and Dr. Scoffern.
  - Vol. 5.—PRACTICAL ASTRONOMY, NAVIGATION, AND NAUTICAL ASTRONOMY, by Hugh Breem, Greenwich Observatory, Professor Young and E. J. Lowe, F.R.A.S.
  - Vol. 6.—ELEMENTARY CHEMISTRY.—The Imponderable Agents and Inorganic Bodies, by John Scoffern, M.D.
  - Vol. 7.—PRACTICAL CHEMISTRY.—Monographs on Electro-Metallurgy; the Photographic Art; Chemistry of Food and its Adulterations; and Artificial Light; by George Gore, Birmingham, John Scoffern, M.D., Dr. Edward Bronner, Bradford, Marcus Sparling, and John Martin.
  - Vol. 8.—MATHEMATICAL SCIENCE.—Philosophy of Arithmetic; Algebra and its Solutions; Plane Geometry; Logarithms; Plane and Spherical Trigonometry; Mensuration and Practical Geometry, with use of Instruments, by Prof. Young, Rev. J. F. Twisden, M.A., Sandhurst College, and Alexander Jardine, C.E.
  - Vol. 9.—MECHANICAL PHILOSOPHY.—The Properties of Matter, Elementary Statics; Dynamics; Hydrostatics; Hydrodynamics; Pneumatics; Practical Mechanics; and the Steam Engine, by the Rev. Walter Mitchell, M.A., J. R. Young, and John Imray.

# CIRCLE OF THE SCIENCES (The), in Separate

			s.	d.
I.	Ansted's Geology and Physical Geography		2	6
2.	Breem's Practical Astronomy	,	2	6
3.	Bronner and Scoffern's Chemistry of Food and Diet .	,	I	6
4.	Bushnan's Physiology of Animal and Vegetable Life .		I	6
5.	Gore's Theory and Practice of Electro-Deposition .		I	6
6.	IMRAY'S Practical Mechanics		I	6
7.	IMRAY'S Treatise on the Steam Engine		2	0
	JARDINE'S Practical Geometry		I	6
	LATHAM'S Varieties of the Human Species		ı	6
	MARTIN'S Photographic Art: Its Theory and Practice .		2	6
	MITCHELL & TENNANT'S Crystallography & Mineralogy	,	3	0
	MITCHELL'S Properties of Matter and Elementary Statics		I	6
	OWEN'S Principal Forms of the Skeleton and the Teeth.		I	6
14.	Primary Atlas of Modern and Ancient Geography		2	6
	Primary Atlas of Geography, col		3	6
16.	Scoffern's Chemistry of Light, Heat and Electricity .		3	0
17.	Scoffern's Chemistry of the Inorganic Bodies		3	0
18.	Scoffern's Chemistry of Artificial Light		I	6
19.	Scoffern and Lowe's Practical Meteorology		I	6
	SMITH's Introduction to Botany: Structural & Systematic		2	0
21.	TWISDEN'S Plane and Spherical Trigonometry		I	6
22.	TWISDEN on Logarithms		I	0
23.	Young's Elements of Algebra		- I	0
24.	Young's Solutions of Questions in Algebra		- I	0
	Young's Navigation and Nautical Astronomy		2	6
	Young's Plane Geometry		I	6
	Young's Simple Arithmetic		I	0
	Young's Elementary Dynamics			

# DALLAS (W.S., F.L.S.): POPULAR HISTORY

OF THE ANIMAL CREATION: being a Systematic and Popular Description of the Habits, Structure and Classification of Animals. With coloured Frontispiece and many hundred Illustrations. Crown 8vo. Cloth, 8,6. New Edition.

#### TELEGRAPHY.

DOUGLAS (John Christie, Society of Telegraphic Engineers, East India Government Telegraph Department, &c.): A MANUAL OF TELEGRAPH CONSTRUCTION. For the use of Telegraph Engineers and others. With numerous Diagrams. Crown 8vo. Cloth bevelled, 15/-

#### GENERAL CONTENTS.

- PART I.—GENERAL PRINCIPLES OF STRENGTH AND STABILITY, comprising the Strength of Materials; the Distribution of Load and Stress in Telegraph Structures, such as Poles—simple, strutted, tied, stayed, coupled, and trussed; the Catenary, with application of its Formulæ to the cases of Wires and Cables; Theory of the Submersion of Cables, &c.
- PART II.—PROPERTIES AND APPLICATIONS OF MATE-RIALS, OPERATIONS, AND MANIPULATION, including the Principles and Practice of, and Numerical Data for, designing Simple Structures, such as Poles of Iron and Wood; Iron and Wooden Masts—simple and compound; Specifications for Wire, &c.; Soldering; Surveying; the Raising of heavy Masts; Insulating Materials and their Applications, &c.
- PART III.—TELEGRAPH CONSTRUCTION, MAINTENANCE AND ORGANISATION, treating of the Application of the Information conveyed in Parts I and II. to the case of Combined Structures, including the Construction of Overground, Subterranean, and Subaqueous Lines; Office Fittings; Estimating; Organisation, &c.

"Mr. Douglas deserves the thanks of Telegraphic Engineers for the excellent 'Manual' now before us . . . . he has ably supplied an existing want . . . . the subject is treated with great clearness and judgment . . . . good practical information given in a clear, terse style."—Engineering.

"Mr. Douglas's work is, we believe, the first of its kind. . . . The author is evidently a practical Telegraphic Engineer. . . . The amount of information given is such as to render this volume a most useful guide to any one who may be engaged in any branch of Electric-Telegraph Engineering."—Athenœum.

"The book is calculated to be of great service to Telegraphic Engineers. . . . . the arrangement is so judicious that with the aid of the full table of contents, reference to any special point should be easy."—Iron.

GRIFFIN (John Joseph, F.C.S.): CHEMICAL RECREATIONS: A Popular Manual of Experimental Chemistry. With 540 Engravings of Apparatus. Crown 4to. Cloth. Tenth Edition.

Part I. Elementary Chemistry, price 2/-

Part II. The Chemistry of the Non-Metallic Elements, including a Comprehensive Course of Class Experiments, price 10/6.

Or, complete in one volume, cloth, gilt top, 12/6.

LEARED (Arthur, M.D., F.R.C.P., Senior Physician to the Great Northern Hospital): ON IMPERFECT DIGESTION: Its Causes and Treatment. Post 8vo. Cloth, 4/6. Sixth Edition.

"It now constitutes about the best work on the subject."-Lancet.

"Dr. Leared has treated a most important subject in a practical spirit and popular manner."—Medical Times and Gazette.

"A useful manual of the subject upon which it treats, and we welcome it as an addition to our Medical Literature."—Dublin Quarterly Journal of Medical Science.

MOFFITT (Staff-Assistant-Surgeon A., of the Royal Victoria Hospital, Netley): A MANUAL OF INSTRUCTION FOR ATTENDANTS ON THE SICK AND WOUNDED IN WAR. Published under the sanction of the National Society for Aid to the Sick and Wounded in War. With numerous Illustrations. Post 8vo. Cloth, 5/-

"A work by a practical and experienced author. After an explicit chapter on the Anatomy of the Human Body, directions are given concerning bandaging, dressing of sores, wounds, &c., assistance to wounded on field of action, stretchers, mule litters, ambulance, transport, &c. All Dr. Moffitt's instructions are assisted by well executed illustrations."—Public Opinion.

"A well written volume. Technical language has been avoided as much as possible, and ample explanations are afforded on all matters on the uses and management of the Field Hospital Equipment of the British Army."—Standard.

NAPIER (James, F.R.S.E., F.C.S.): A MANUAL OF ELECTRO-METALLURGY. Comprising the Applications of the Art to Manufacturing Processes; the Newest Methods of depositing Copper, Silver, Gold, and other Metals. With numerous Illustrations. Crown 8vo, cloth, 7/6. Fifth Edition.

"The Fifth Edition has all the advantages of a new work, and of a proved and tried friend. Mr. Napier is well-known for the carefulness and accuracy with which he writes . . . there is a thoroughness in the handling of the subject which is far from general in these days . . . The work is one of those which, besides supplying first-class information, are calculated to inspire invention."—Jeweller and Watchmaker.

NAPIER (James, F.R.S.E., F.C.S.): A MANUAL OF THE ART OF DYEING AND DYEING RECEIPTS. Illustrated by Diagrams and Numerous Specimens of Dyed Cotton, Silk, and Woollen Fabrics. Demy 8vo., cloth, 21/-. Third Edition, thoroughly revised and greatly enlarged.

#### GENERAL CONTENTS:

PART I.—HEAT AND LIGHT:

Their effects upon Colours and the changes they produce in many Dyeing Operations.

PART II .- A CONCISE SYSTEM OF CHEMISTRY, with special reference to Dyeing:

Elements of Matter, their physical and chemical properties, producing in their combination the different Acids, Salts, &c., in use in the Dye-House.

PART III.-MORDANTS AND ALTERANTS:

Their composition, properties, and action in fixing Colours within the Fibre.

PART IV .- VEGETABLE MATTERS in use in the Dye-House: 1st, those containing Tannin, Indigo, &c.; 2ndly, the various Dyewoods and Roots, as Logwood, Madder, Bark, &c.

PART V.—ANIMAL DYES: Cochineal, Kerms, Lac, &c.

PART VI.-COAL-TAR COLOURS:

Their Discovery, Manufacture, and Introduction to the Dyeing-Art, from the discovery of MAUVE to ALIZARIN.

APPENDIX.—RECEIPTS FOR MANIPULATION:

Bleaching; Removing Stains and Dyes; Dyeing of different Colours upon Woollen, Silk, and Cotton Materials, with

"In this work Mr. Napier has done good service.....being a Practical Dyer himself, he knows the wants of his confrores.....the Article on Water is a very valuable one to the Practical Dyer enabling him readily to detect impurities, and correct their action.....The Article on Indigo is very exhaustive.....the Dyeing Receipts are very numerous, and well illustrated."—Textile Manufacturer.

NICHOL (J. P., LL.D., late Professor of Astronomy in the University of Glasgow): A CYCLOPÆDIA OF THE PHYSICAL SCIENCES; comprising Acoustics, Astronomy, Dynamics, Electricity, Heat, Hydrodynamics, Magnetism, Philosophy of Mathematics, Meteorology, Optics, Pneumatics, Statics, etc., etc. With Maps, Engravings, and numerous Illustrations. Demy 8vo. bound, Roxburghe style, gilt top, 21/- Third Edition.

"It takes its place at once, and of course, among standard works..... The ground of our opinion is the excellence of the matter and the freshness of the articles."—

Athenæum.

"Well printed and illustrated, and most ably edited."-Examiner. 'A most useful book of reference, deserving of high commendation."-Westminster Review.

## PHILLIPS (J. Arthur, M. Inst. C.E., F.C.S., F.G.S.,

Ancien Élève de l'École des Mines, Paris): ELEMENTS OF METAL-LURGY: A Practical Treatise on the Art of Extracting Metals from their Ores. With over two hundred Illustrations, many of which have been reduced from Working Drawings. Royal 8vo, 764 pages, cloth, 34/-

#### GENERAL CONTENTS:

I.—A Treatise on Fuels and Refractory Materials.

II.—A Description of the principal METALLIFEROUS MINERALS, with their DISTRIBUTION.

III.—Statistics of the amount of each Metal annually produced throughout the World, obtained from official sources, or, where this has not been practicable, from authentic private information.

IV.—The METHODS of ASSAYING the different ORES, together with the Processes of Metallurgical Treatment, comprising: Iron, Cobalt, Nickel, Aluminium, Copper, Tin, Antimony, ARSENIC, ZINC, MERCURY, BISMUTH, LEAD, SILVER, GOLD and PLATINUM.

and PLATINUM.

"Elements of Metallurgy' possesses intrinsic merits of the highest degree. Such a work is precisely wanted by the great majority of students and practical workers, and its very compactness is in itself a first-rate recommendation. The author has treated with great skill the metallurgical operations relating to all the principal metals. The methods are described with surprising clearness and exactness.....In our opinion the best work ever written on the subject with a view to its practical treatment."—Westminster Review.

"In this work work of the document was polytope to the property of the property

our opinion the best work ever written on the subject with a view to its practical treatment."—Westminster Review.

"In this most useful and handsome volume Mr. Phillips has condensed a large amount of valuable practical knowledge......We have not only the results of scientific inquiry most cautiously set forth, but the experiences of a thoroughly practical man, very clearly given......A careful study of the first division of the book, on Fuels, will be found to be of great value to every one in training for the practical applications of our scientific knowledge to any of our metallurgical operations."—Athenaum.

"For twenty years the learned author, who might well have retired with honour on account of his acknowledged success and high character as an authority in Metallurgy, has been making notes, both as a Mining Engineer and a practical Metallurgist, and devoting the most valuable portion of his time to the accumulation of materials for this, his Masterpiece. There can be no possible doubt that 'Elements of Metallurgy' will be eagerly sought for by Students in Science and Art, as well as by Practical Workers in Metals.....Two hundred and fifty pages are devoted exclusively to the Metallurgy of Iron, in which every process of manufacture is treated, and the latest improvements accurately detailed."—Colliery Guardian.

"The value of this work is almost inestimable. There can be no question that the amount of time and labour bestowed on it is enormous.....There is certainly no Metallurgical Treatise in the language calculated to prove of such general utility to the Student really seeking sound practical information upon the subject, and none which gives greater evidence of the extensive metallurgical knowledge of its author."

—Mining Journal.

-Mining Journal.

## INTERNATIONAL PRIZE-ESSAY.

PORTER: (Surgeon-Major J. H., Assistant-

Professor of Military Surgery in the Army Medical School). THE SURGEON'S POCKET-BOOK: an Essay on the Best Treatment of the Wounded in War; for which a Prize was awarded by Her Majesty the Empress of Germany. Specially adapted to the Public Medical Services. With numerous Illustrations, 16mo, roan, 7/6.

"Just such a work as has long been wanted, in which men placed in a novel position, can find out quickly what is best to be done. We strongly recommend it to every officer in the Public Medical Services."—Practitioner.

"A great deal of useful information in a clear concise form."—Saturday Review.

#### SCIENTIFIC WORKS by

## W. J. MACOUORN RANKINE, C.E., LL.D., F.R.S.,

&c.,

Late Regius Professor of Civil Engineering in the University of Glasgow.

## I.—RANKINE (Prof.): APPLIED MECHANICS

(A Manual of); comprising the Principles of Statics and Cinematics, and Theory of Structures, Mechanism and Machines. With numerous Diagrams. Revised by E. F. BAMBER, C.E. Crown 8vo. Cloth, 12/6. Eighth Edition.

"Cannot fail to be adopted as a text-book......The whole of the information is so admirably arranged that there is every facility for reference."—Mining Journal.

## II.—RANKINE (Prof.): CIVIL ENGINEERING

(A Manual of); comprising Engineering Surveys, Earthwork, Foundations, Masonry, Carpentry, Metal-work, Roads, Railways, Canals, Rivers, Water-works, Harbours, &c. With numerous Tables and Illus-Revised by E. F. BAMBER, C.E. Crown 8vo. Cloth, 16/trations. Eleventh Edition.

"Far surpasses in merit every existing work of the kind. As a Manual for the hands of the professional Civil Engineer it is sufficient and unrivalled, and even when we say this we fall short of that high appreciation of Dr. Rankine's labours which we should like to express."—The Engineer.
"The 'Manual of Civil Engineering' might, without any impropriety, be termed an

encyclopædia of the science, for it touches—and that with a master hand—every branch

of it."-Mechanics' Magazine.

#### MACHINERY AND III.—RANKINE (Prof.):

MILL WORK (A Manual of); comprising the Geometry, Motions, Work, Strength, Construction, and Objects of Machines, &c. Illustrated with nearly 300 Woodcuts. Revised by E. F. BAMBER, C.E.

Crown 8vo. Cloth, 12/6. Second Edition.
"Professor Rankine's 'Manual of Machinery and Millwork' fully maintains the high reputation which he enjoys as a scientific author; higher praise it is difficult to award to any book. It cannot fail to be a lantern to the feet of every engineer."—The

Engineer.

#### IV.—RANKINE (Prof.): The STEAM ENGINE and OTHER PRIME MOVERS (A Manual of). With Diagram of the Mechanical Properties of Steam, numerous Tables and Illustrations. Revised by E. F. BAMBER, C.E. Crown 8vo. Cloth, 12/6. Eighth Edition.

V.—RANKINE (Prof.): USEFUL RULES and TABLES. For Architects, Builders, Carpenters, Coachbuilders, Engravers, Engineers, Founders, Mechanics, Shipbuilders, Surveyors, Wheelwrights, &c. Crown 8vo. Cloth, 9/- Fourth Edition.

"Undoubtedly the most useful collection of engineering data hitherto produced."-

Mining Journal.

VI.—RANKINE (Prof.): MECHANICAL TEXT-BOOK. Being a Practical and Simple Introduction to the Study of Mechanics. By Professor Macquorn Rankine and E. F. Bamber, C.E. With numerous Illustrations. Crown Svo. Cloth, 9/- Second Edition.

"The work, as a whole, is very complete, and likely to prove invaluable for furnishing a useful and reliable outline of the subjects treated of."-Mining Journal.

SHELTON (W. V., Foreman to the Imperial Ottoman Gun-Factories, Constantinople). THE MECHANIC'S GUIDE: A Hand-book for Engineers and Artizans. With Copious Tables and Valuable Recipes for Practical Use. Illustrated. Crown 8vo, cloth, 7/6

#### GENERAL CONTENTS:

I —Arithmetic PART

PART II .- Geometry.

PART III .- Mensuration.

PART IV .-- Velocities in Boring and Wheel-Gearing.

PART V.-Wheel and Screw-Cutting.

VI -- Miscellaneous PART

PART VII .-- The Steam-Engine. PART VIII.—The Locomotive.

"THE MECHANIC'S GUIDE will answer its purpose as completely as a whole series of elaborate text-books."—Mining Journal.

"Ought to have a place on the bookshelf of every mechanic."—Iron.

"Much instruction is here given without pedantry or pretension."—Builder.

"A sine qua non to every practical Mechanic."-Railway Service Gazette.

\*\*\* This Work is specially intended for Self-Teachers, and places before the Reader a concise and simple explanation of General Principles, together with Illustrations of their adaptation to Practical Purposes.

#### HOMSON (Robert Dundas, M.D., F.R.S.): A POPULAR DICTIONARY OF CHEMISTRY, Practical and Theo-THOMSON retical. With its applications to Mineralogy, Physiology, and the Arts. With numerous Illustrations, Post 8vo. Cloth. 8/6.

"Its limited compass, its completeness and correctness, recommend this Cyclopædia of Chemistry to all who feel an interest in the science."—Athenæum.

"In every respect worthy of praise. It is, within a limited space, by far the best Compendium of Chemistry which we have yet seen.—Lancet.

#### THOMSON (Spencer, M.D., L.R.C.P., Edinburgh): A DICTIONARY of DOMESTIC MEDICINE and HOUSEHOLD SURGERY. Thoroughly revised and brought down to the present state of Medical Science. With an additional chapter on the Management of the Sick Room; and Hints for the Diet and Comfort of Invalids. Many Illustrations. Demy 8vo, 750 pages. Cloth, 8/6. Eleventh Edition.

"The best and safest book on Domestic Medicine and Household Surgery which has yet appeared."—London Journal of Medicine.

"Dr. Thomson has fully succeeded in conveying to the public a vast amount of useful professional knowledge."—Dublin Journal of Medical Science.

"Worth its weight in gold to families and the clergy."—Oxford Herald.

# (James, Editor of the "Circle of the Sciences"): THE MAGIC OF SCIENCE; a Manual of Easy and Instructive Scientific Experiments. With Steel Portrait of Faraday, and many hundred Engravings. Crown 8vo. Cloth gilt, and gilt edges, 5/- Third Edition.

"To those who need to be allured into the paths of natural science, by witnessing the wonderful results that can be produced by well-contrived experiments, we do not know that we could recommend a more useful volume."—Athenaum.

# Educational Works.

#### VIRGILII OPERA:

BRYCE (Archibald Hamilton, D.C.L., LL.D., Senior Classical Moderator in the University of Dublin): THE WORKS OF VIRGIL. Text from Heyne and WAGNER. English Notes, original, and selected from the leading German, American and English Commentators. Illustrations from the antique. In three parts. Fcap. 8vo. Cloth, 2/6 each.

> Part I. Bucolics and Georgics. The Æneid, Books I.-VI. Part III. The Æneid, Books VII.—XII.

Or, complete in one volume. Cloth, 6/-

"Contains the pith of what has been written by the best scholars on the subject.
..... The notes comprise everything that the student can want."—Athenæum.

"The most complete, as well as elegant and correct, edition of Virgil ever published in this country."—Educational Times.

"The best commentary on Virgil which a student can obtain."—Scotsman.

COBBETT (William): ENGLISH GRAMMAR in a Series of Letters, intended for the use of Schools and Young Persons in general. With an additional Chapter on Pronunciation, by the Author's Son, JAMES PAUL COBBETT. Fcap. Svo. Cloth, 1,6. (The only correct and authorized Edition).

"A new and cheapened edition of that most excellent of all English Grammars William Cobbett's. It contains new copyright matter, as well as includes the equally amusing and instructive 'Six Lessons intended to prevent statesmen from writing in an awkward manner.'"—Atlas.

#### COBBETT (William): A FRENCH GRAMMAR. Fcap. 8vo. Cloth, 3/6. Fourteenth Edition.

"Cobbett's French Grammar' comes out with perennial freshness. There are few grammars equal to it for those who are learning, or desirous of learning, French without a teacher. The work is excellently arranged, and in the present edition we note certain careful and wise revisions of the text."—School Board Chronicle.

"Business men commencing the study of French will find this treatise one of the best aids.....It is largely used on the Continent."—Midland Counties Herald.

- COBBETT (Miss S.): FRENCH VERBS AND EXERCISES. Fcap. 8vo. Cloth, 1/6.
- COBBETT (James Paul): A LATIN GRAM-MAR. Fcap. 8vo. Cloth, 2/-
- COLERIDGE (Samuel Taylor): A DISSERTA-TION ON THE SCIENCE OF METHOD. (Encyclopædia Metropolitana.) With a Synopsis. Crown 8vo. Cloth, 2/- Ninth Edition.

#### CRAIK'S ENGLISH LITERATURE.

A COMPENDIOUS HISTORY OF ENGLISH LITERATURE AND OF THE ENGLISH LANGUAGE from the Norman Conquest. With numerous specimens. By George Lillie Craik, LL.D., late Professor of History and English Literature, Queen's College, Belfast. In two vols. Royal 8vo. Handsomely bound in cloth, 25/-; full calf, gilt edges, 37/6 New Edition.

#### GENERAL CONTENTS.

INTRODUCTORY.

I .- THE NORMAN PERIOD-The Conquest.

II.—Second English—commonly called Semi-Saxon.

III .- THIRD ENGLISH-Mixed, or Compound English.

IV .- MIDDLE AND LATTER PART OF THE SEVENTEENTH CENTURY.

V .- THE CENTURY BETWEEN THE ENGLISH REVOLUTION AND THE FRENCH REVOLUTION.

VI.—The Latter Part of the Eighteenth Century.

VII.—THE NINETEENTH CENTURY: (a) THE LAST AGE OF THE GEORGES.

VIII -

(b) THE VICTORIAN AGE.

With numerous Excerpts and Specimens of Style.

"Anyone who will take the trouble to ascertain the fact, will find how completely even our great poets and other writers of the last generation have already faded from the view of the present with the most numerous class of the educated and reading public. Scarcely anything is generally read except the publications of the day. Yet

public. Scarcely anything is generally read except the publications of the day. Yet nothing is more certain than that no true cultivation can be so acquired. This is the extreme case of that entire ignorance of history which has been affirmed, not with more point than truth, to leave a person always a child.....

"The present work combines the History of the Literature with the History of the Language. The scheme of the course and revolutions of the Language which is followed here is extremely simple, and resting not upon arbitrary, but upon natural or real distinctions, gives us the only view of the subject that can claim to be regarded as of a scientific character."—Extract from the Author's Preface.

"Professor Craik's book going, as it does, through the whole history of the language, probably takes a place quite by itself. The great value of the book is its thorough comprehensiveness. It is always clear and straightforward, and deals not in theories but in facts."—Saturday Review.

"Professor Craik has succeeded in making a book more than usually agreeable."-The Times.

## CRAIK (Prof.): A MANUAL OF ENGLISH

LITERATURE, for the Use of Colleges, Schools and Civil Service Examinations. Selected from the larger work, by Dr. CRAIK. Crown 8vo. Cloth, 7/6. Sixth Edition.

"A Manual of English Literature from so experienced and well-read a scholar as Professor Craik needs no other recommendation than the mention of its existence."-

"This augmented effort will be, we doubt not, received with decided approbation by those who are entitled to judge, and studied with much profit by those who want to learn.....If our young readers will give healthy perusal to Dr. Craik's work, they will greatly benefit by the wide and sound views he has placed before them."— Athenæum.

\* \* Text-Book in the University of Edinburgh.

#### HORATII OPERA:

CURRIE (Joseph, formerly Head Classical Master of Glasgow Academy): THE WORKS OF HORACE. Text from Orellius. English Notes, original, and selected from the best Commentators. Illustrations from the antique. In two parts. Fcap. 8vo. Cloth, 3/- each.

Part I. Carmina. Part II. Satires.

Or, complete in one volume. Cloth, 5/-

"The notes are excellent and exhaustive." - Quarterly Journal of Education.

- CURRIE (Joseph): EXTRACTS FROM CÆSAR'S COMMENTARIES; containing his description of Gaul, Britain and Germany. With Notes, Vocabulary, &c. Adapted for Young Scholars. 18mo. Cloth, 1/6. Fourth Edition.
- D'ORSEY (Rev. A. J., B.D., M.C.P., Lecturer at Corpus Christi College, Cambridge): SPELLING BY DICTATION: Progressive Exercises in English Orthography, for Schools and Civil Service Examinations. 18mo. Cloth, 1/- Fourteenth Thousand.
- McBURNEY (Isaiah, LL.D.): EXTRACTS FROM OVID'S METAMORPHOSES. With Notes, Vocabulary, &c. Adapted for Young Scholars. 18mo. Cloth, 1/6. Third Edition.

#### COBBIN'S MANGNALL:

- MANGNALL'S HISTORICAL AND MIS-CELLANEOUS QUESTIONS, for the Use of Young People. By RICHMAL MANGNALL. Greatly enlarged and corrected, and continued to the present time. By INGRAM COBBIN, M.A. 12mo. Cloth 4/- Forty-eighth Thousand. New Illustrated Edition.
- MENTAL SCIENCE: SAMUEL TAYLOR COLERIDGE'S CELEBRATED ESSAY ON METHOD; Archbishop Whately's Treatises on Logic and Rhetoric. Crown 8vo. Cloth, 5/- Tenth Edition.
- MORRISON (Charles): BOOK-KEEPING, A COMPLETE SYSTEM OF PRACTICAL, Exemplified in Five Sets of Books, arranged by Single Entry, Double Entry in present practice, and a new method of Double Entry by Single. With an Appendix containing a variety of Illustrations and Exercises, and a Series of Engraved Forms of Accounts. By C. Morrison, Accountant. With valuable additions and improvements. Post 8vo. Half-bound, 8/- Tenth Edition.

#### WORKS BY WILLIAM RAMSAY, M.A., Trinity College, Cambridge, late Professor of Humanity in the University of Glasgow.

# A MANUAL OF ROMAN ANTIOUITIES.

For the use of Advanced Students. With Map, numerous Engravings and very copious Index. Revised and enlarged, with an additional Chapter on Roman Agriculture. Crown 8vo. Cloth, 8/6. Tenth Edition.

GENERAL CONTENTS.

I.—The Typography of Rome.

II.-The Origin of the Roman People; their Political and Social Organization; Religion; Kalendar; and Private Life.

III .- General Principles of the Roman Constitution; the Rights of Different Classes; the Roman Law and Administration of Justice

IV .- The Comitia; Magistrates; the Senate.

V .- Military and Naval Affairs; Revenues; Weights and Measures; Coins. &c.

VI .- Public Lands; Agrarian Laws; Agriculture, &c.

"In compiling this Treatise, I have endeavoured to present in a connected form, such information on the Typography of the Roman City, on the rise and gradual development of the Roman Constitution, and on the social and domestic habits and feelings of the Roman People, as may serve to remove some of the obstacles which impede the progress of those who are desirous of applying themselves to the study of Latin Literature."—Extract from the Author's Preface.

"Comprises all the results of modern improved scholarship within a moderate

compass."-Athenæum.

\*\* Text-Book in the Universities of Edinburgh and Glasgow.

- (Prof.): AN ELEMENTARY MANUAL OF ROMAN ANTIQUITIES. Adapted for Junior Classes. With numerous Illustrations. Crown 8vo. Cloth, 4/- Sixth Ed.
- A MANUAL OF LATIN RAMSAY (Prof.): PROSODY. Illustrated by Copious Examples and Critical Remarks. For the use of Advanced Students. Revised and greatly enlarged. Crown 8vo. Cloth, 5/- Fifth Edition.
- RAMSAY (Prof.): AN ELEMENTARY MANUAL OF LATIN PROSODY. Adapted for Junior Classes. Crown 8vo. Cloth, 2/-
- SCHOOL BOARD READERS (The). A New Series of Standard Reading Books for Elementary Schools. Edited by a FORMER H.M. INSPECTOR OF SCHOOLS. Recommended by the London School Board, and adopted by many School Boards throughout the country.

ELEMENTARY READING BOOK, PART I.—Containing Lessons s. d. in all the Short Vowel Sounds. Demy 18mo., 16 pages. I

In stiff wrapper ... ELEMENTARY READING BOOK, PART II.—Containing the Long Vowel Sounds and other Monosyllables. Demy 18mo, 48 pages. In stiff wrapper . . .

School Board Readers—(continued).		
STANDARD I.—Containing Reading, Dictation, and Arith-	s.	d.
metic. Demy 18mo, 96 pages. Neat cloth	0	4
STANDARD II.—Containing Reading, Dictation and Arith-		
metic. Demy 18mo, 128 pages. Neat cloth	0	6
STANDARD III.—Containing Reading, Dictation and Arith-		
metic. Fcap. 8vo, 160 pages. Neat cloth	0	9
STANDARD IV.—Containing Reading, Dictation and Arith-		
metic. Fcap. 8vo, 192 pages. Neat cloth	I	0
STANDARD V.—Containing Reading, Dictation and Arith-		
metic, with an Explanation of the Metric System and		
numerous Examples. Crown Svo, 256 pages. Neat		
cloth	I	6
STANDARD VI.—Containing Selections from the best English		
Authors, Hints on Composition, and Lessons on Scien-		
tific Subjects. Crown 8vo, 320 pages. Neat cloth .	2	0
KEY TO THE QUESTIONS IN ARITHMETIC, in two parts, each	0	6
"The general conception is sound, and the execution praiseworthy. The sele	ectio	ons
seem, on the whole, happily and judiciously made In the sixth and last w	zoliu	me
we have an excellent chronological selection from our English classics	By t	he

English literature."—Leeds Mercury.

"The choice of matter is excellent, and so are the method and style. We begin with wholesome stories, poems, and lessons on natural history, brightened with wood-natural history, bright cuts; and we go on to matters of general information and useful knowledge in a very attractive shape, till we arrive at a point which ought to turn the pupil out into the world a good reader, a lover of good reading, and an intelligent member of society."— School Board Chronicle.

\*\* Each book of this Series contains within itself all that is necessary to fulfil the requirements of the Revised Code, viz.: Reading, Spelling and Dictation Lessons, together with Exercises in Arithmetic, for the whole year. The paper, type and binding are all that ean be desired.

# SCHOOL BOARD MANUALS (The). On the

Specific Subjects of the Revised Code. By a former H.M. Inspector of Schools, Editor of the "School Board Readers." Recommended by the London School Board, and used in many Schools throughout the country. Price 6d. each in stiff wrapper; cloth neat, 7d.

I. ALGEBRA.—In this book, which is adapted to Standards IV., V. and VI., everything is explained (in accordance with the Pestalozzian system) upon first principles, and the examples are, as far as possible, taken from concrete numbers. Abundance of examples are given, graduated by easy stages.

II. ENGLISH HISTORY.—This book is exactly suited to the requirements of the Code for Standards IV., V. and VI., the chief events of importance being given in detail, and the general landmarks of history in brief. Copious Tables are added.

School Board Manuals-(continued).

III. GEOGRAPHY.—Contains all that is necessary for passing in

Standards IV., V. and VI.

IV. PHYSICAL GEOGRAPHY.—Contents: Figure of the Earth -Mountain Systems-Ocean Currents-Atmospheric Phenomena-Trade Winds-Distribution of Plants, Animals, and Races of Men. &c.

V. ANIMAL PHYSIOLOGY.—Contents: Classification of Animals-the Human Skeleton-Bones, Muscles, Skin, Hair, and Nails-Digestion, Circulation, Respiration, Secretion, and Nutrition—the Nervous System—the Senses. Illustrated by good

Engravings.

VI. BIBLE HISTORY .- Contents: Names, Divisions, and History of the Bible-Analysis of the Old and New Testaments-

Geography of Palestine—Tables of Measures, &c.

It is hoped that this book will prove serviceable in the study of the Scriptures. All controversial points have been carefully

"These simple and well-graduated Manuals, adapted to the requirements of the New Code, are the most elementary of elementary works, and extremely cheap...... They are more useful, as practical guide-books, than most of the more expensive works."—Standard.

"The Series will prove a very reliable and substantial aid to the teacher. In the Bible History Manual all controversial points have been avoided, and, as a groundwork and help to the study of the Scriptures, it is to be warmly commended."— Western Daily Mercury.

- \* \* Specimen copies of the School Board Readers and Manuals supplied to Teachers at half-price.
- SENIOR (Nassau William, M.A., late Professor of Political Economy in the University of Oxford): A TREATISE ON POLITICAL ECONOMY; the Science which treats of the Nature, the Production, and the Distribution of Wealth. Crown 8vo. Cloth, 4/- Fifth Edition. (Encyclopædia Metropolitana).
- THOMSON (James): THE SEASONS. With an Introduction and Notes by ROBERT BELL, Editor of the "Annotated Series of British Poets." Foolscap 8vo. Cloth, 1/6. Third Edition. "An admirable introduction to the study of our English classics."
- WHATELY (Archbishop): A TREATISE LOGIC. With Synopsis and Index. Crown 8vo. Cloth, 3/- The Original Edition. (Encyclopædia Metropolitana).
- WHATELY (Archbishop): A TREATISE ON RHETORIC. With Synopsis and Index. Crown 8vo. Cloth, 3/6. The Original Edition. (Encyclopædia Metropolitana).
- WYLDE (James, Editor of "The Circle of the Sciences"): A MANUAL OF MATHEMATICS, Pure and Applied. Including Arithmetic, Algebra, Geometry, Trigonometry (Plane and Spherical), Logarithms, Mensuration, &c. Super-royal 8vo. Cloth, 10/6.

# Poetry and Illustrated Works.

BELL (Robert, Editor of the "Annotated Series of British Poets."): GOLDEN LEAVES FROM THE WORKS OF THE POETS AND PAINTERS. Illustrated by Sixty-four superb Engravings on Stcel, after Paintings by David Roberts, Stanfield, Leslie, Stothard, Haydon, Cattermole, Nasmyth, Sir Thomas Lawrence, and many others, and engraved in the first style of Art by Finden, Greatbach, Lightfoot, &c. 4to. Cloth gilt, 21/-; unique walnut binding, 30/-; morocco antique, 35/- Second Edition.

"'Golden Leaves' is by far the most important book of the season. The illustrations are really works of art, and the volume does credit to the arts of England."—Saturday Review.

"The Poems are selected with taste and judgment."-Times.

"The engravings are from drawings by Stothard, Newton, Danby, Leslie, and Turner, and it is needless to say how charming are many of the above here given."—Athenaum.

CHRISTIAN YEAR (The): Thoughts in Verse for the Sundays and Holy Days throughout the Year. With a Memoir of the Rev. John Keble, by W. Temple, Portrait, and Sixteen beautiful Engravings on Steel after eminent Masters. In 4to, handsome cloth, bevelled, 12/6; unique walnut boards, 21/-; morocco antique, 25/-; morocco extra, 30/-

ILLUSTRATIONS. ..after H. HOWARD, R.A. Morning The Old Mansion .. after C. W. RADCLYFFE. Sunset The Cathedral Choir " G. BARRETT. LEVAINT. A Mountain Stream C. BENTLEY. A Mountain Stream
A River Scene
A Mountain Lake
A Greek Temple
A Village Church.
The Wayside Cross

C. Bentley.
C. W. RADCLYFFE.
J. N. W. TURNER
C. W. RADCLYFFE.
TONY JOHANNOT. Sunset (after CLAUDE),, G. BARRETT. Moonlight .. Moonlight ... "HOFLAND.
Pastoral Landscape "C. W. RADCLYFFE.
Halt in the Desert. "D. ROBERTS, R.A.
Guardian Angels ... "H. Howard, R.A.
The Church Gate ... "C. W. RADCLYFFE. HOFLAND.

"An Edition de luxe, beautifully got up......Admirably adapted for a Gift-Book."

—John Bull.

\*\* This is the only issue of the "Christian Year," with Memoir and Portrait of the

\*\*\* This is the only issue of the "Christian Year," with Memoir and Portrait of the Author. In ordering, Griffin's Edition should be specified.

# D'AUBIGNE (Dr. Merle): HISTORY OF THE REFORMATION. With the Author's latest additions and a new

Preface. Many Woodcuts, and Twelve Engravings on Steel, illustrative of the Life of Martin Luther, after Labouchère. In one large volume, demy 4to. Elegantly bound in cloth, 21/-

"In this edition the principal actors and scenes in the great drama of the Sixteenth Century are brought vividly before the eye of the reader, by the skill of the artist and engraver."

#### EARTH DELINEATED WITH PEN AND

PENCIL (The): an Illustrated Record of Voyages, Travels, and Adventures all round the World. Illustrated with more than Two Hundred Engravings in the first style of Art, by the most eminent Artists, including several from the master pencil of Gustave Doré. Demy 4to, 750 pages. Very handsomely bound, 21/-

# THE EMERALD SERIES OF STANDARD AUTHORS.

Illustrated by Engravings on Steel, after Stothard, Leslie, David Ro-Berts, Stanfield, Sir Thomas Lawrence, Cattermole, &c. Fcap. 8vo. Cloth gilt.

Particular attention is requested to this very beautiful series. The delicacy of the engravings, the excellence of the typography, and the quaint antique head and tail-pieces, render them the most beautiful volumes ever issued from the press of this country, and now, unquestionably, the cheapest of their class.

- BURNS' (Robert) SONGS AND BALLADS. With an Introduction on the Character and Genius of Burns. By THOMAS CARLYLE. Carefully printed in antique type, and illustrated with Portrait and beautiful Engravings on Steel. Cloth, gilt edges, 3/malachite, 10/6. Second Thousand.
- BYRON (Lord): CHILDE HAROLD'S PIL-GRIMAGE. With Memoir by Professor Spalding. Illustrated with Portrait and Engravings on Steel by Greatbach, Miller, Lightfoot, &c., from Paintings by Cattermole, Sir T. Lawrence, H. Howard, and Stothard. Beautifully printed on toned paper. Cloth, gilt edges, 3/-; malachite, 10/6. Third Thousand.
- CAMPBELL (Thomas): THE PLEASURES OF HOPE. With Introductory Memoir by the Rev. Charles Rogers, LL.D., and several Poems never before published. Illustrated with Portrait and Steel Engravings. Cloth, gilt edges, 3/-; malachite, 10/6. Second Thousand.
- CHATTERTON'S (Thos.) POETICAL WORKS. With an Original Memoir by Frederick Martin, and Portrait. Beautifully illustrated on Steel, and elegantly printed. Cloth, gilt edges, 3/-; malachite, 10/6. Fourth Thousand.
- GOLDSMITH'S (Oliver) POETICAL WORKS. With Memoir by Professor Spalding. Exquisitely illustrated with Steel Engravings. Printed on superior toned paper. Cloth, gilt edges, 3/-; malachite, 10/6. New Edition. Seventh Thousand.
- GRAY'S (Thomas) POETICAL WORKS. With Life by the Rev. John Mitford, and Essay by the Earl of Carlisle. With Portrait and numerous Engravings on Steel and Wood. Elegantly printed on toned paper. Cloth, gilt edges, 5/-; malachite, 12/6. Eton Edition, with the Latin Poems. Fifth Thousand.
- HERBERT'S (George) POETICAL WORKS.
  With Memoir by J. NICHOL, B.A., Oxon., Prof. of English Literature in the University of Glasgow. Edited by Charles Cowden Clarke.
  Antique headings to each page. Cloth, gilt edges, 3/-; malachite, 10/6.
  Sccond Thousand.

THE EMERALD SERIES—(continued).

KEBLE (Rev. John): THE CHRISTIAN YEAR. With Memoir by W. TEMPLE, Portrait, and Eight beautiful Engravings on Steel. Cloth, gilt edges, 5/-; malachite, 12/6. Just published.

POE'S (Edgar Allan) COMPLETE POETICAL WORKS. Edited, with Memoir, by JAMES HANNAY. Full-page Illustrations after Wehnert, Weir, &c. Toned paper. Cloth, gilt edges, 3/-; malachite, 10/6. Thirteenth Thousand.

Other Volumes in preparation.

#### FINDEN'S FINE ART WORKS.

- BEAUTIES OF MOORE; being a Portraits of his principal Female Characters, from Paintings by eminent Artists, engraved in the highest style of Art by EDWARD FINDEN, with a Memoir of the Poet, and descriptive letter-press. Folio. Cloth gilt, and gilt edges, 42/-
- DRAWING-ROOM TABLE BOOK Series of 31 highly-finished Steel Engravings, with descriptive Tales by Mrs. S. C. Hall, Mary Howitt, and others. Folio. Cloth gilt, and gilt edges, 21/-
- GALLERY OF MODERN ART (The); a Series of 31 highly-finished Steel Engravings, with descriptive Tales by Mrs. S. C. HALL, MARY HOWITT, and others. Folio. Cloth gilt, and gilt edges, 21/-
- GOLDSMITH'S (Oliver) COMPLETE POET-ICAL WORKS. With a Memoir by WILLIAM SPALDING, A.M., Professor of Logic and Rhetoric in the University of St. Andrew's. Portrait and numerous Illustrations on Steel and Wood. Fcap. 4to. Most elaborately gilt, cloth, 5/-
- GRAEME (Elliott): BEETHOVEN: a Memoir. With an Essay (Quasi Fantasia) "on the Hundredth Anniversary of his Birth," and Remarks on the Pianoforte Sonatas, with hints to Students. By Dr. FERDINAND HILLER, of Cologne. New Edition in preparation.

"This elegant and interesting Memoir......The newest, prettiest, and most readable sketch of the immortal Master of Music."—Musical Standard.

"A gracious and pleasant Memorial of the Centenary."—Spectator.

"This delightful little book—concise, sympathetic, judicious."—Manchester

"We can, without reservation, recommend it as the most trustworthy and the pleasantest Memoir of Beethoven published in England."—Observer.

"A most readable volume, which ought to find a place in the library of every admirer of the great Tone-Poet."—Edinburgh Daily Review.

### GRAEME (Elliott): A NOVEL WITH TWO HEROES. In 2 vols., post 8vo. Cloth, 21/- Second Edition.

" A decided literary success."-Athenœum.

"A decided literary success."—Athenxum.

"Clever and amusing......above the average even of good novels.....free from sensationalism, but full of interest.....touches the deeper chords of life.....delineation of character remarkably good."—Spectator.

"Superior in all respects to the common run of novels."—Daily News.

"A story of deep interest......The dramatic scenes are powerful almost to painfulness in their intensity."—Scotsman.

HOGARTH: The Works of William Hogarth, in a Series of One Hundred and Fifty Steel Engravings by the First Artists, with Descriptive Letterpress by the Rev. John Trusler, and Introductory Essay on the Genius of Hogarth, by James Hannay. Folio. Cloth, gilt edges, 52/6.

"The Philosopher who eyer preached the sturdy English virtues which have made us what we are.

- KEBLE and HERBERT. THE CHRISTIAN YEAR, by John Keble, with Memoir of the Author by W. Temple; and THE TEMPLE, by George Herbert, with Memoir by Prof. Nichol. In one vol. 8vo, illustrated. Cloth, elegant, 7/6.
- KNIGHT (Charles): PICTORIAL GALLERY (The) OF THE USEFUL AND FINE ARTS. Illustrated by numerous beautiful Steel Engravings, and nearly Four Thousand Woodcuts. Two vols., folio. Cloth gilt, and gilt edges, 42/-
- KNIGHT (Charles): PICTORIAL MUSEUM (The) OF ANIMATED NATURE. Illustrated with Four Thousand Woodcuts. Two vols., folio. Cloth gilt, and gilt edges, 35/-
- MILLER (Thomas, Author of "Pleasures of a Country Life," &c.): THE LANGUAGE OF FLOWERS. With Eight beautifully-coloured Floral Plates. Fcap. 8vo. Cloth, gilt edges, 3/6. Fourteenth Thousand.

" A book In which thou wilt find many a lovely saying About the leaves and flowers."—KEATS.

- MILLER (Thomas): THE LANGUAGE OF FLOWERS. Abridged from the larger work by Thomas MILLER. With Coloured Frontispiece. Limp cloth, 6d. Cheap Edition.
- POE'S (Edgar Allan) COMPLETE POETICAL WORKS. Edited, with Memoir, by James Hannay. Full-page Illustrations after Wehnert, Weir, and others. In paper wrapper, Illustrated, 1/6.

### SHAKSPEARE: THE FAMILY. The Dramatic

Works of WILLIAM SHAKSPEARE, edited and expressly adapted for Home and School Use. By THOMAS BOWDLER, F.R.S. With Twelve beautiful Illustrations on Steel. Crown 8vo. Cloth gilt, 8/-; morocco, elegant, 15/-

\* \* This unique Edition of the great dramatist is admirably suited for home use; while objectionable phrases have been expurgated, no rash liberties have been taken with the text.

"It is quite undeniable that there are many passages in Shakspeare which a father could not read aloud to his children—a brother to his sister—or a gentleman to a lady; and every one almost must have felt or witnessed the extreme awkwardness, and every one amost must have left of withessed the expressions...

Those who recollect such scenes must all rejoice that Mr. Bowdler has provided a security against their recurrence.....This purification has been accomplished with surprisingly little loss, either of weight or value; the base alloy in the pure metal of Shakspeare has been found to amount to an inconceivably small proportion..... It has in general been found easy to extirpate the offensive expressions of our great roct without any injury to the context, or any visible sear or blank in the composition. They turn out to be not so much cankers in the flowers, as weeds that have sprung up by their side—not flaws in the metal, but impurities that have gathered on its surface—and, so far from being missed on their removal, the work generally appears more natural and harmonious without them."—Lord Jeffrey in the Edinburgh Review.

### SHAKSPEARE'S DRAMATIC & POETICAL

WORKS. Revised from the Original Editions, with a Memoir and Essay on his Genius by Barry Cornwall. Also Annotations and Introductory Remarks on his Plays, by R. H. HORNE and other eminent writers. With numerous Woodcut Illustrations and Full-page Steel Engravings, by Kenny Meadows. Three vols., super-royal 8vo. Cloth gilt, 42/- Tenth Edition.

## SHAKSPEARE'S WORKS. Edited by T. O.

HALLIWELL, F.R.S., F.S.A. With Historical Introductions, Notes Explanatory and Critical, and a series of Portraits on Steel. Three vols., royal 8vo. Cloth gilt, 50/-

## SOUTHGATE (Henry): MANY THOUGHTS

OF MANY MINDS: being a Treasury of Reference, consisting of Selections from the Writings of the most celebrated Authors, compiled and analytically arranged by HENRY SOUTHGATE. Toned paper, square 8vo. Cloth gilt, elegant, 12/6; morocco antique, 21/- Twenty-fourth

"The produce of years of research."-Examiner.

"Destined to take a high place among books of this class."—Notes and Queries.

"A treasure to every reader who may be fortunate enough to possess it."—English Journal of Education.

"The accumulation of treasures truly wonderful."—Morning Herald.
"This is a wondrous book."—Daily News.
"Worth its weight in gold to literary men."—Builder.
"More valuable to the preacher than many more technical aids."—Clerical

## SOUTHGATE (Henry): MANY THOUGHTS

OF MANY MINDS. Second Series. Square 8vo, toned paper. Cloth gilt, elegant, 12/6; morocco antique, 21/- Third Edition.

"We are not surprised that a Second Series of this work should have been called for. Preachers and Public Speakers will find that it has special uses for them."—
Edinburgh Daily Review.

"Fully sustains the deserved reputation of the First Series."-John Bull.

"Its interest is not of to-day only, or of any particular time, but of all days and all seasons."—Scotsman.

" A volume of stately size and handsome exterior." - Spectator.

TIMBS (John, F.S.A., Author of "The Curiosities of London," &c.): PLEASANT HALF-HOURS FOR THE FAMILY CIRCLE. Containing Popular Science, Thoughts for Times and Seasons, Oddities of History, Characteristics of Great Men, and Curiosities of Animal and Vegetable Life. Fcap. 8vo. Cloth gilt, and gilt edges, 5/- Second Edition.

"Contains a wealth of useful reading of the greatest possible variety."—Plymouth Mercury.

VOICES OF THE YEAR (The); Or, the Poet's Kalendar. Containing the choicest Pastorals in our Language. Profusely Illustrated by the best Artists. In bevelled boards, elaborately ornamented and gilt, 12/6.

WANDERINGS IN EVERY CLIME; Or, Voyages, Travels, and Adventures All Round the World. Edited by W. F. Ainsworth, F.R.G.S., F.S.A., &c., and embellished with upwards of Two Hundred Illustrations by the first Artists, including several from the master pencil of Gustave Doré. Demy 4to, 800 pages. Cloth and gold, bevelled boards, 21/-

WYLDE (James, formerly Lecturer on Natural Philosophy at the Polytechnic): THE MAGIC OF SCIENCE: A Manual of Easy and Amusing Scientific Experiments. With Steel Portrait of Faraday and many hundred Engravings. Crown 8vo. Cloth gilt, and gilt edges, 5/- Third Edition.

"Of priceless value to furnish work for idle hands during the holidays. A thousand mysteries of Modern Science are here unfolded. We learn how to make Oxygen Gas, how to construct a Galvanic Battery, how to gild a Medal by Electroplating, or to reproduce one by Electrotyping, how to make a Microscope or take a Photograph, while the elements of Mechanics are explained so simply and clearly that the most unmechanical of minds must understand them. Such a work is deserving of the highest praise."—The Graphic.

# Works of General Interest and Utility.

BROUGHAM (The Life of Lord). His Career as a Statesman, a Lawyer, and a Philanthropist, from authentic sources. By John McGilchrist. With a fine Portrait on Steel. Fcap. 8vo. Cloth, 2/6.

### THE WORKS OF WILLIAM COBBETT.

THE ONLY AUTHORIZED EDITIONS.

MEN and (incidentally) to Young Women, in the Middle and Higher Ranks of Life. In a series of Letters addressed to a Youth, a Bachelor, a Lover, a Husband, a Father, a Citizen, and a Subject. Fcap. 8vo. Cloth, 2/6. New Edition. With admirable Portrait on Steel.

"Cobbett's great qualities were immense vigour, resource, energy, and courage, joined to a force of understanding, a degree of logical power, and above all a force of expression, which have rarely been equalled.......He was the most English of Englishmen."—Saturday Review.

"With all its faults, Cobbett's style is a continual refreshment to the lover of English undefiled."—Pall Mall Gazette.

## COBBETT (William): COTTAGE ECONOMY.

Containing information relative to the Brewing of Beer, Making of Bread, Keeping of Cows, Pigs, Bees, Poultry, &c.; and relative to other matters deemed useful in conducting the affairs of a Poor Man's Family. New Edition, Revised by the Author's Son. Fcap. Svo. Cloth, 2/6. Eighteenth Edition.

COBBETT (Wm.): EDUCATIONAL WORKS.

## COBBETT (Wm): A LEGACY to LABOURERS;

An Argument showing the Right of the Poor to Relief from the Land. With a Preface by the Author's Son, John M. Cobbett, M.P. for Oldham. Fcap. 8vo. Cloth, 1/6. New Edition.

"The book cannot be too much studied just now."—Nonconformist.
"Cobbett was, perhaps, the ablest Political writer England ever produced, and his influence as a Liberal thinker is felt to this day............It is a real treat to read his

strong, racy language."—Public Opinion.

## COBBETT (Wm.): A LEGACY to PARSONS: Or, Have the Clergy of the Established Church an Equitable Right to Tithes and Church Property? With a New Preface by the Author's Son, W. COBBETT. Fcap. 8vo. Cloth, 1/6. New Edition.

"The most powerful work of the greatest master of political controversy this country has ever produced."—Pall Mall Gazette.

## COBBETT (Miss Anne): THE ENGLISH HOUSEKEEPER; Or, Manual of Domestic Management. Containing Advice on the Conduct of Household Affairs, and Practical Instructions, intended for the Use of Young Ladies who undertake the superintendence of their own Housekeeping. Fcap. 8vo. Cloth, 3/6.

#### COOK'S VOYAGES. VOYAGES ROUND THE WORLD, by Captain Cook. Illustrated with Maps and numerous Engravings. Two vols. Super-royal Svo. Cloth, 30/-

OWDY (Rev. Samuel, F. R. Hist. Society): HEAVENWARD HO; Or, Story Coxen's Log. Crown 8vo. Cloth, 5/-

" The style is simple and pointed, characterised by a nervous energy which never slackens, and there is scarcely a sentence which does not felicitously embody a great truth of Scripture."—Literary World.

"A very effective and cleverly-written allegory, in which the progress of the soul in religious experience is portrayed."—The Rock.

CRAIK (Prof.): A COMPENDIOUS HISTORY OF ENGLISH LITERATURE, AND OF THE ENGLISH LAN-GUAGE FROM THE NORMAN CONQUEST. With numerous Specimens. By George L. CRAIK, LL.D. (late Professor of History and English Literature, Queen's College, Belfast). In two large vols. Royal 8vo. Handsomely bound in cloth, 25/-; in full calf, 37/6. New Edition.

"Professor Craik's book going, as it does, through the whole history of the language, probably takes a place quite by itself. The great value of the book is its thorough comprehensiveness. It is always clear and straightforward, and deals not in theories but in facts."—Saturday Review.

"Professor Craik has succeeded in making a book more than usually agreeable."—The Times."

### CRAIK (Prof.): A MANUAL OF ENGLISH LITERATURE. (See page 19).

## DALGAIRNS (Mrs.): THE PRACTICE OF

COOKERY, adapted to the business of Every-day Life. By Mrs. DALGAIRNS. The best book for Scotch dishes. About Fifty new Receipts have been added to the present Edition, but only such as the Author has had adequate means of ascertaining to be valuable. Fcap. 8vo. Cloth, 3/6. Sixteenth Edition.

"This is by far the most complete and truly practical work which has yet appeared on the subject. It will be found an infallible 'Cook's Companion,' and a treasure of great price to the mistress of a family."—Edinburgh Literary Journal.

"We consider we have reason strongly to recommend Mrs. Dalgairns' as an economical, useful, and practical system of cookery, adapted to the wants of all families, from the tradesman to the country gentleman."—Spectator.

- DONALDSON (Joseph, Sergeant in the 94th Scots Regiment): RECOLLECTIONS OF THE EVENTFUL LIFE OF A SOLDIER IN THE PENINSULA. Fcap. 8vo. Cloth, 3/6; gilt sides and edges, 4/- New Edition.
- ENGLISHWOMAN'S LIBRARY (The): A Series of Moral and Descriptive Tales. By Mrs. Ellis. Cloth, each volume, 2/6; with gilt backs and edges, 3/-
  - I.-THE WOMEN OF ENGLAND: Their Social Duties and Domestic Habits. Thirty-ninth Thousand.
  - 2.-THE DAUGHTERS OF ENGLAND: Their Position in Society, Character, and Responsibilities. Twentieth Thousand.
  - 3.-THE WIVES OF ENGLAND: Their Relative Duties, Domestic Influence, and Social Obligations. Eighteenth Thousand.
  - 4.—THE MOTHERS OF ENGLAND: Their Influence and Responsibilities. Twentieth Thousand.
  - 5.- FAMILY SECRETS; Or, Hints to make Home Happy. Three vols. Twenty-third Thousand.
  - 6.-SUMMER AND WINTER IN THE PYRENEES. Tenth Thousand.
  - Or, Varieties of AND TEMPERAMENT; 7.—TEMPER Two vols. Tenth Thousand. Character.
  - 8.—PREVENTION BETTER THAN CURE; Or, The Moral Wants of the World we live in. Twelfth Thousand.
  - g.-HEARTS AND HOMES; Or, Social Distinctions. Three vols. Tenth Thousand.

- FISHER'S READY RECKONER. The best in the world. 18mo. Bound, 1/6. New Edition.
- GILMER'S INTEREST TABLES: Tables for Calculation of Interest, on any sum, for any number of days, at ½, 1, 1½, 2, 2½, 3, 3½, 4, 4½, 5 and 6 per Cent. By Robert Gilmer. Corrected and enlarged. 12mo. Roan lettered, 5/- Sixth Edition.
- HENDERSON'S FRACTIONAL RECKONER. 32mo. Cloth, 6d.
- HENDERSON'S READY RECKONER. 32mo. Roan, 6d.
- HENDERSON'S TRADE TABLES. 32mo.
- HENDERSON'S UNIVERSAL RECKONER. 18mo. Cloth, 2/6.
- INTEREST TABLES: (A COMPLETE SYSTEM OF) at 3, 4, 4½ and 5 per Cent.; Tables of Exchange or Commission, Profit and Loss, Discount, Clothiers', Malt, Spirit and various other useful Tables. By John Christison. To which is prefixed the Mercantile Ready Reckoner, containing Reckoning Tables from one thirty-second part of a penny to one pound. Greatly chlarged. 12mo. Bound in leather, 4/6. New Edition.
- MACKEY'S FREEMASONRY: A Lexicon of Freemasonry. Containing a Definition of its Communicable Terms, Notices of its History, Traditions, and Antiquities, and an Account of all the Rites and Mysteries of the Ancient World. By Albert G. Mackey, M.D., Secretary-General of the Supreme Council of the U.S., &c. Handsomely bound in cloth, 5/- Sixth Edition.

"Of Mackey's Lexicon it would be impossible to speak in too high terms; suffice it to say, that in our opinion, it ought to be in the hands of every Mason who would thoroughly understand and master our noble Science.......No Masonic Lodge or Library should be without a copy of this most useful work."—Masonic News.

OCCULT SCIENCES (Compendium of the): Containing the Traditions and Superstitions of Past Times, and the Marvels of the Present Day, in a Series of Historical Sketches. By the Rev. Edward Smedley, M.A., E. Rich, Esq., and other Contributors. (Encyclopædia Metropolitana). Crown 8vo. Cloth, 6/-

"A repository of curious information......most instructive and interesting reading."—Literary Gazette.

## LONDON LABOUR AND THE LONDON

POOR: A Cyclopædia of the Condition and Earnings of those that will work and those that cannot work. By HENRY MAYHEW. With many full-page Illustrations from Photographs. In three vols. Demy 8vo. Cloth, 4/6 each.

"Every page of the work is full of valuable information, laid down in so interesting

"Mr. Henry Mayhew's famous record of the habits, earnings, and sufferings of the London poor."—Lloyd's Weekly London Newspaper.

"This remarkable book, in which Mr. Mayhew gave the better classes their first real insight into the habits, modes of livelihood, and current of thought of the London poor."—The Patriot.

The Extra Volume.

#### LABOUR AND THE LONDON LONDON

POOR: Those that will not work. Comprising the Non-workers, by Henry Mayhew; Prostitutes, by Bracebridge Hemyng; Thieves, by John Binny; Beggars, by Andrew Halliday. With an Introductory Essay on the Agencies at Present in Operation in the Metropolis for the Suppression of Crime and Vice, by the Rev. WILLIAM TUCKNISS, B.A., Chaplain to the Society for the Rescue of Young Women and Children. With Illustrations of Scenes and Localities. In one large vol. Royal 8vo. Cloth 10/6.

"The work is full of interesting matter for the casual reader, while the philanthropist and the philosopher will had details of the greatest import."-C:ty Press.

Companion Volume to the above.

## THE CRIMINAL PRISONS OF LONDON, and

Scenes of Prison Life. By HENRY MAYHEW and JOHN BINNY. Illustrated by nearly two hundred Engravings on Wood, principally from Photographs. In one large vol. Imperial Svo. Cloth, 10/6.

CONTENTS: - General View of London, its Population, Size and Contrasts—Professional London—Criminal London—Pentonville Prison-The Hulks at Woolwich-Millbank Prison-The Middlesex House of Detention-Coldbath Fields-The Middlesex House of Correction, Tothill Fields-The Surrey House of Correction, Wandsworth-Newgate-Horsemonger Lane-Clerkenwell.

"This volume concludes Mr. Henry Mayhew's account of his researches into the crime and poverty of London. The amount of labour of one kind or other, which the whole series of his publications represents, is something almost incalculable."—Literary Budget.

\*4\* This celebrated Record of Investigations into the condition of the Poor of the Metropolis, undertaken from philanthropic motives by Mr. Henry Mayhew, first gave the wealthier classes of England some idea of the state of Heathenism, Degradation, and Misery, in which multitudes of their poorer brethren languished. His revelations created, at the time of their appearance, universal horror and excitement—that a nation, professedly Christian, should have in its midst a vast population, so sunk in ignorance, vice, and very hatred of Religion, was deemed incredible, until further examination established the truth of the statements advanced. The result is well known. The London of Mr. Mayhew will, happily, soon exist only in his pages. To those who would appreciate the efforts already made among the ranks which recruit our "dangerous" classes, and who would learn what yet remains to be done, the work will afford enlightenment, not unmingled with surprise. surprise.

- THE SHILLING MANUALS. By JOHN TIMBS, F.S.A., Author of "The Curiosities of London," &c. A Series of Hand-Books, containing Facts and Anecdotes interesting to all Readers. Fcap. 8vo. Neat cloth, one shilling each. Second Edition.
- I .- CHARACTERISTICS OF EMINENT MEN. By John Timbs. Bound in neat cloth, price 1/-"It is impossible to dip into this booklet without finding something that is new or that will bear repeating."—Sheffield Daily Telegraph.

II.—CURIOSITIES OF ANIMAL AND VEGETABLE LIFE. By JOHN TIMBS. Neat cloth, price 1/-

"Has the charm of freshness, besides containing much curious information."—
Sheffield Telegraph.

III.—ODDITIES OF HISTORY AND STRANGE STORIES FOR ALL CLASSES. Selected and compiled by JOHN TIMBS.

"The reader is presented with many curious tit-bits of history, instructive and valuable in themselves......an interesting companion for spare minutes."—
Edinburgh Daily Review.

IV .- ONE THOUSAND DOMESTIC HINTS on the Choice of Provisions, Cookery and Housekeeping; New Inventions and Improvements, and various branches of Household Management. Written and compiled by JOHN TIMBS. Neat cloth, price 1/-

"No money is better spent than what is laid out for domestic satisfaction."—Dr.

7ohnson.

V.—POPULAR SCIENCE. Recent Researches on the Sun, Moon, Stars and Meteors; The Earth; Phenomena of Life; Sight and Sound; Inventions and Discoveries. Familiarly Illustrated. Written

- and compiled by John Timbs. Neat cloth, price 1/
  "A very useful little manual."—Sheffield Daily Telegraph.

  "Will be found abundant in much out of the way information on almost every conceivable topic, where the popular mind is for the most part in error."—Evening Standard.
- VI.—THOUGHTS FOR TIMES AND SEASONS. Selected and compiled by John Times. Neat cloth, price 1/-

"Contains a very great amount and variety of out-of-the-way extracts from modern and old writings."—Mechanic's Magazine.

"In a neat and concise form, are brought together striking and beautiful passages from the works of the most eminent divines and moralists, and political and scientific writers of acknowledged ability."—Edinburgh Daily Review.

#### Opinions of the Press on the Series.

"It is difficult to determine which of these volumes is the most attractive. Will be found equally enjoyable on a railway journey, or by the fireside."—Mining Journal.

"These additions to the Library, produced by Mr. Timbs' industry and ability, are useful, and in his pages many a hint and suggestion, and many a fact of importance, is stored up that would otherwise have been lost to the public."—Builder.

"Capital little books of about a hundred pages each, wherein the indefatigable Author is seen at his best."—Mechanics' Magazine.

"Extremely interesting volumes."—Evening Standard.

"Amusing, instructive, and interesting......As food for thought and pleasant reading, we can heartily recommend the 'Shilling Manuals.'"—Birmingham Daily Gazette.

#### TWENTY-FOURTH THOUSAND.

Large 8vo., Cloth, with 150 Illustrations, 8s. 6d.

A DICTIONARY OF

## DOMESTIC MEDICINE AND HOUSEHOLD SURGERY.

SPENCER THOMSON, M.D., EDIN., F.R.C.S.

Thoroughly revised and brought down to the present state of Medical Seienee. With Appendix on the Management of the Siek-room, and many Hints for the Diet and Comfort of Invalids.

### From the Author's Prefatory Address.

"WITHOUT entering upon that difficult ground which correct professional knowledge, and educated judgment, can alone permit to be safely trodden, there is a wide and extensive field for exertion, and for usefulness, open to the unprofessional, in the kindly offices of a true Domestic Medicine, the timely help and solace of a simple Household Surgery, or better still, in the watchful care more generally known as "Sanitary Precaution," which tends rather to preserve health than to cure disease. "The touch of a gentle hand" will not be less gentle because guided by knowledge, nor will the safe domestic remedies be less anxiously or carefully administered. Life may be saved, suffering may always be alleviated. Even to the resident in the midst of civilization, the "knowledge is power" to do good; to the settler

and the emigrant it is invaluable.

I know well what is said by a few, about injuring the medical profession, by making the public their own doctors. Nothing will be so likely to make "long cases" as for the public to attempt any such folly; but people of moderate means-who, as far as medical attendance is concerned, are worse off than the pauper-will not call in and fee their medical adviser for every slight matter, and, in the absence of a little knowledge, will have recourse to the prescribing druggist, or to the patent quackery which flourishes upon ignorance, and upon the mystery with which some would invest their calling. And not patent quackery alone, but professional quackery also, is less likely to find footing under the roof of the intelligent man, who, to common sense and judgment, adds a little knowledge of the whys and wherefores of the treatment of himself and family. Against that knowledge which might aid a sufferer from accident, or in the emergency of sudden illness, no humane man could offer or receive an objection.'

Notices of the Press.

"Worth its weight in gold to families and the clergy."-Oxford Herald.

<sup>&</sup>quot;The best and safest book on Domestic Medicine and Household Surgery which has yet appeared."—The London Journal of Medicine.

"Dr. Thomson has fully succeded in conveying to the public a vast amount of useful professional knowledge."—The Dublin Journal of Medical Science.

"The best production of the kind we possess."—The Christian Witness.

"The amount of useful knowledge conveyed in this work is surprising."—The Medical lines and Garette. limes and Gazette.

